

ST. Y
Cornell

C O R N E L L U N I V E R S I T Y M E D I C A L B U L L E T I N

VOLUME X.

NUMBER 3

ANNOUNCEMENT
OF THE
MEDICAL COLLEGE
NEW YORK AND ITHACA
1921

JANUARY, 1921
PUBLISHED BY CORNELL UNIVERSITY
477 FIRST AVENUE
NEW YORK CITY

CORNELL UNIVERSITY MEDICAL BULLETIN

Issued Quarterly

Entered as Second Class Matter, June 23, 1911, at the Post Office, at New York, N. Y.,
under the Act of August 24, 1912

Acceptance for mailing at special rate of postage provided for
in Section 1103, Act of October 3, 1917, authorized

These publications include

The Annual Announcement of the Medical College and
Reprinted Studies from the Several Departments of the Medical College
and its Research Laboratories

C O R N E L L
U N I V E R S I T Y
M E D I C A L B U L L E T I N

A N N O U N C E M E N T
O F T H E
M E D I C A L C O L L E G E
N E W Y O R K A N D I T H A C A
1 9 2 1

JANUARY, 1921
PUBLISHED BY CORNELL UNIVERSITY
477 FIRST AVENUE
NEW YORK CITY

CONTENTS

	PAGE
Calendar	5
Board of Trustees	6
Medical College Council	7
Faculty of Medicine	8
Lecturers	11
Instructors and Assistants	11
Clinical Instructors	15
Clinical Assistants	16
Officers of Administration	16
Dispensary Staff	16
General Statement	19
Requirements for Admission	23
Applications for Admission	24
Admission to Advanced Standing	24
Admission to Special Courses	25
Requirements for License to Practice Medicine in the State of New York	25
National Board of Medical Examiners	26
Charges for Instruction	26
Location and Mode of Access	27
Plan of Instruction	28
Details of the Plan of Instruction	31
Anatomy	31
Physiology	35
Chemistry	35
Pharmacology	37
Medicine	38
Surgery	42
Obstetrics	46
Pathology	47
Bacteriology	50

	PAGE
Special Departments of Medicine and Surgery	52
Neurology	52
Psychiatry	52
Pediatrics	53
Gynæcology	53
Urology	56
Dermatology	57
Laryngology and Rhinology	58
Ophthalmology	58
Otology	59
Orthopædic Surgery	60
Roentgenology	60
Hygiene	61
Medical Jurisprudence	62
Fourth Year Electives	63
Schedule of Courses	70
Examinations and Advancement in Course	78
Requirements for Graduation	80
Hospital Appointments	81
Alpha Omega Alpha	82
Courses for Graduates	83
The Graduate School	87
Facilities for Graduate Study and Courses of Instruction	91
Graduates, 1920	109
Students, 1920-1921	112
Candidates for the Degree of Doctor of Medicine.....	112
Candidates for the Degree of Doctor of Philosophy.....	118
Graduate Students—Not Candidates for a Degree	118

ITHACA DIVISION

	PAGE
Faculty of Medicine at Ithaca	94
Calendar for Ithaca	95
General Statement	95
Departments, Methods and Facilities	97
Anatomy	97
Histology and Embryology	99
Physiology and Biochemistry	100
Schedule, and Summarized Statement	103
Schedule of Required Courses	103
Summary of Required Courses	103
Requirements for Admission	104
Combined A.B. and M.D. Degrees	105
Residence and Registration	105
Examinations	106
Advancement from First to Second Year	106
Charges for Instruction	106
Schedule of Instruction	108

CALENDAR

1921

- Jan. 3. Monday, 9 A.M.—Second term begins.
- Feb. 22. Tuesday—Legal holiday.
- March 12. Saturday, 6 P.M.—Second term ends.*
- March 14. Monday, 9 A.M.—Third term begins.*
- March 24. Thursday, 6 P.M.—Easter recess begins.
- March 28. Monday, 9 A.M.—Easter recess ends.
- May 28. Saturday, 6 P.M.—Third term ends.
- May 30. Monday—Legal holiday.
- May 31. Tuesday—Examinations begin.
- June 9. Thursday—Commencement.
- Sept. 16. Friday—Examinations begin for admission to the first year of all departments of Cornell University at Ithaca, N. Y.
- Sept. 20. Tuesday—Examinations begin for conditioned students and for those applying for advanced standing in the Medical College at New York City.
- Sept. 26. Monday—Registration.
- Sept. 27. Tuesday, 9 A.M.—Instruction begins.
- Nov. 8. Tuesday—Election Day. Legal holiday.
- Nov. 23. Wednesday, 6 P.M.—Thanksgiving recess begins.
- Nov. 28. Monday, 9 A.M.—Thanksgiving recess ends.
- Dec. 17. Saturday, 6 P. M.—First term ends.* Christmas recess begins.

1922

- Jan. 2. Monday, 9 A.M.—Christmas recess ends. Second term begins.*
- Feb. 22. Wednesday—Legal holiday.
- March 11. Saturday, 6 P.M.—Second term ends.*
- March 13. Monday, 9 A.M.—Third term begins.*
- April 13. Thursday, 6 P.M.—Easter recess begins.
- April 17. Monday, 9 A.M.—Easter recess ends.
- May 27. Saturday, 6 P.M.—Third term ends.
- May 29. Monday—Examinations begin.
- May 30. Tuesday—Legal holiday.
- June 8. Thursday—Commencement.

*The session is subdivided into three terms of eleven, ten, and eleven weeks, respectively, and courses are scheduled in conformity with this subdivision.

All students must be registered at the secretary's office at the opening of the session. No student will be admitted after Registration Day without special permission of the Faculty. Immediately after registration the fees must be paid at the treasurer's office.

Any student may take the first year at either New York City or Ithaca. All students take the last three years at New York City only.

BOARD OF TRUSTEES

The PRESIDENT of the University		Ithaca
The GOVERNOR of New York State		Albany
The LIEUTENANT-GOVERNOR of N. Y. State		Albany
The SPEAKER of the Assembly	Ex-Officio	Albany
The STATE COMMISSIONER of Education		Albany
The STATE COMMISSIONER of Agriculture		Albany
The PRESIDENT of the State Agricultural Soc.		Albany
The LIBRARIAN of the Cornell Library		Ithaca
CHARLES EZRA CORNELL, A.B., LL.B.		Ithaca
*WALTER P. COOKE, LL.B. (B.)		Buffalo
*FRANK H. HISCOCK, A.B. (B.)		Syracuse
*IRA A. PLACE, A.B. (B.)		New York
*HERBERT D. MASON, LL.B. (A.)		Tulsa, Okla.
*JAMES HARVEY EDWARDS, C.E. (A.)		New York
*FRANK H. MILLER, V.S. (G.)		New York
JARED T. NEWMAN, Ph.B., LL.B. (B.)		Ithaca
MYNDERSE VAN CLEFF, B.S. (B.)		Ithaca
ROBERT H. TREMAN, B.M.E. (B.)		Ithaca
JOHN C. WESTERVELT, B.S. in Arch. (A.)		New York
MRS. HARRIET TILDEN MOODY, B.Lit. (A.)		Chicago, Ill.
THOMAS B. WILSON (G.)		Hall
HENRY HERMAN WESTINGHOUSE (B.)		New York
CHARLES E. TREMAN, B.L. (B.)		Ithaca
ROGER B. WILLIAMS, A.M. (B.)		Ithaca
CUTHBERT W. POUND (A.)		Albany
JOHN L. SENIOR, LL.B. (A.)	Cement City, Mich.	
J. DUPRATT WHITE, B.L. (G.)	New York	
CHARLES H. BLOOD, Ph.B., LL.B. (B.)	Ithaca	
C. SIDNEY SHEPARD, A.B., LL.B. (B.)	New Haven	
HENRY W. SACKETT, A.B. (B.)	New York	
EDWIN N. SANDERSON, M.E. (A.)	New York	
ROGER H. WILLIAMS, Ph.B. (A.)	New York	
GEORGE A. BLAUVELT, B.L. (G.)	Monsey	
HENRY RUBENS ICKELHEIMER, B.L. (B.)	New York	
CHARLES M. SCHWAB (B.)	New York	
EMMONS L. WILLIAMS (B.)	Ithaca	
GEORGE J. TANSEY, B.L. (A.)	St. Louis, Mo.	
LOUIS L. SEAMAN, A.B. (A.)	New York	
HORACE WHITE, A.B., LL.B. (G.)	Syracuse	
WILLIAM F. PRATT (Gr.)	Batavia	

CHARLES D. BOSTWICK, A.B., LL.B., *Comptroller* and
Secretary of Board of Trustees

Ithaca

*Term of office (5 years) expires in 1921, the next group of six in 1922, etc.
B., elected by Board. A., elected by Alumni. G., appointed by the Governor. Gr.,
elected by the New York State Grange for 1920-21.

MEDICAL COLLEGE COUNCIL

At the foundation of the Medical College the following resolution establishing a Medical College Council and determining its functions was adopted by the Board of Trustees of Cornell University.

Resolved, That for the purpose of making recommendations to the Board of Trustees or the Executive Committee in relation to the business management of the Medical College there be established, and there is hereby established, a Medical College Council which shall consist of seven members, to wit: the President of the University (who shall be *ex-officio chairman*), the Dean of the Medical College, and three trustees to be elected by the Board of Trustees or the Executive Committee, who shall be appointed, one for one year, one for two years, and one for three years, and their successors to be appointed for three years, and two members of the Faculty, to be elected by the Faculty, who shall be appointed, one for one year and one for two years, and their successors to be appointed for two years, and that all appointments to fill vacancies be made for unexpired terms.

The Council at present consists of the following members:

ALBERT WILLIAM SMITH, Acting-President of the University
and Chairman *ex-officio* of the Council.

WALTER L. NILES, Dean of the Medical College.

H. R. ICKELHEIMER,
H. H. WESTINGHOUSE, } of the Board of Trustees.
IRA L. PLACE,

L. A. CONNER,
J. EWING, } of the Faculty.

J. THORN WILLSON, Secretary.

CORNELL UNIVERSITY MEDICAL COLLEGE

FACULTY OF MEDICINE

ALBERT WILLIAM SMITH, B.M.E., M.M.E.,
Acting President.

WALTER L. NILES, M.D.,

*Dean, Professor of Clinical Medicine, Visiting Physician to Bellevue Hospital
and Consulting Physician to Memorial and Southampton Hospitals.*

FREDERIC S. DENNIS, A.B., M.D., F.R.C.S.,

Professor of Clinical Surgery, Emeritus.

NEWTON M. SHAFFER, M.D.,

Professor of Orthopaedic Surgery, Emeritus.

W. GILMAN THOMPSON, Ph.B., M.D.,

Professor of Medicine, Emeritus.

JOSEPH E. WINTERS, M.D.,

Professor of Clinical Medicine, Department of Pediatrics, Emeritus.

GEORGE THOMPSON ELLIOT, A.B., M.D.,

Professor of Clinical Medicine, Department of Dermatology, Emeritus.

GEORGE WOOLSEY, A.B., M.D.,

*Professor of Clinical Surgery, Surgeon to Bellevue Hospital, Consulting Surgeon to
the Memorial Hospital.*

J. CLIFTON EDGAR, Ph.B., A.M., M.D.,

*Professor of Obstetrics and Clinical Midwifery, Obstetrician to Bellevue Hospital,
Obstetric Surgeon to Manhattan Maternity and Dispensary, Consulting Obstetrician
to the City Hospital.*

JAMES EWING, A.M., Sc.D., M.D.,

Professor of Pathology, Director of Cancer Research, Memorial Hospital.

LEWIS A. CONNER, Ph.B., M.D.,

*Professor of Medicine, Physician to New York Hospital, Consulting Physician to
Bellevue, Women's and Memorial Hospitals.*

GRAHAM LUSK, Ph.D., Sc.D., F.R.S. (Edin.),

Professor of Physiology.

FRANK SHERMAN MEARA, A.B., Ph.D., M.D.,

*Professor of Clinical Medicine, Associate Attending Physician to St. Luke's Hospital,
Visiting Physician to Bellevue Hospital, Consulting Physician to Mountainside
Hospital, Montclair, N. J., General Memorial Hospital, Morristown, N. J., St.
Mary's Hospital, Orange, N. J., Dover General Hospital, Dover, N. J., and
Mt. Vernon Hospital, Mt. Vernon, N. Y.*

ROBERT ANTHONY HATCHER, Ph.G., M.D.,

Professor of Pharmacology.

CHARLES R. STOCKARD, M.S., Ph.D.,

Professor of Anatomy.

WILLIAM J. ELSEY, M.D.,

Professor of Bacteriology, Director of Pathological Laboratories New York Hospital.

STANLEY R. BENEDICT, Ph.D.,

Professor of Chemistry, Chemist to the Memorial Hospital, Research Department.

FACULTY OF MEDICINE

CHARLES L. GIBSON, A.B., M.D.,

Professor of Surgery, Surgeon to the New York Hospital, Consulting Surgeon to the Memorial, St. Luke's, City, Southside and Vassar Brothers' Hospitals, and to the State Hospital for Crippled and Deformed Children, Membre de l'Association Française de Chirurgie.

JOHN A. HARTWELL, Ph.B., M.D.,

Associate Professor of Surgery and Professor of Clinical Surgery, Director of Surgery Bellevue Hospital, Consulting Surgeon to the Memorial, Lincoln, Lawrence and United Hospitals.

EUGENE F. DuBOIS, A.B., M.D.,

Associate Professor of Medicine, Director of Medicine, Bellevue Hospital.

CHARLES L. DANA, A.M., M.D., LL.D.,

Professor of Clinical Medicine, Department of Neurology, Consulting Physician to Bellevue Hospital, Neurologist to Women's Hospital, Consulting Neurologist to the Neurological Institute and to the Montefiore Home, Consulting Alienist to Manhattan State Hospital.

FREDERICK WHITING, A.M., M.D.,

Professor of Clinical Surgery, Department of Otology, Aural Surgeon to New York Eye and Ear Infirmary, and to Mount Sinai Hospital and St. Bartholomew's Clinic.

EDWARD L. KEYES, JR., A.B., Ph.D., M.D.,

Professor of Clinical Surgery, Department of Urology, Visiting Urologist to Bellevue and St. Vincent's Hospitals.

ROBERT G. REESE, Ph.G., M.D.,

Professor of Clinical Surgery, Department of Ophthalmology, Ophthalmic Surgeon to New York Eye and Ear Infirmary, Consulting Ophthalmologist to Memorial, St. John's Riverside, Nursery and Child's and Booth Memorial Hospitals, and to the Industrial Clinic.

OTTO H. SCHULTZE, A.B., M.D.,

Professor of Medical Jurisprudence.

ALFRED S. TAYLOR, M.D.,

Professor of Clinical Surgery, Surgeon to the Fordham Hospital, Associate Surgeon to the Neurological Institute, Assistant Surgeon to the Babies' Hospital, Visiting Neurological Surgeon Hospital for the Ruptured and Crippled, Consulting Surgeon to the Tarrytown, White Plains and New York City Children's Hospitals and Schools.

WILLIAM C. THRO, A.M., M.D.,

Professor of Clinical Pathology.

GEORGE GRAY WARD, JR., M.D.,

Professor of Clinical Surgery, Department of Gynaecology, Chief Surgeon to the Women's Hospital, Visiting Surgeon to Bellevue Hospital, Consulting Gynaecologist to the Post Graduate, Italian, Monmouth Memorial and Booth Memorial Hospitals.

ALEXANDER LAMBERT, A.B., Ph.B., M.D.,

Professor of Clinical Medicine, Visiting Physician to Bellevue Hospital.

CHARLES E. NAMMACK, Ph.B., M.D., LL.D.,

Professor of Clinical Medicine, Visiting Physician to Bellevue and St. Vincent's Hospitals.

IRVING S. HAYNES, Ph.B., Sc.D., M.D.,

Professor of Clinical Surgery, Surgeon to Harlem and Red Cross Hospitals, Consulting Surgeon to the Physicians' Hospital, Plattsburg, N. Y.

JOHN ROGERS, A.B., Ph.D., M.D.,

Professor of Clinical Surgery, Surgeon to Bellevue and St. Francis Hospitals.

BURTON J. LEE, A.B., M.D.,

Professor of Clinical Surgery, Associate Attending Surgeon to the New York Hospital and Consulting Surgeon to the Sharon Hospital.

CORNELL UNIVERSITY MEDICAL COLLEGE

HARMON SMITH, A.B., M.D.,

Professor of Clinical Surgery, Department of Laryngology and Rhinology, Surgeon to the Manhattan Eye, Ear and Throat Hospital. Consulting Laryngologist to the Memorial, Muhlenberg, and the Babies' Hospitals.

CHARLTON WALLACE, M.D.,

Professor of Clinical Surgery, Department of Orthopaedic Surgery, Assistant Surgeon Hospital for the Ruptured and Crippled, Orthopaedic Surgeon in charge St. Charles Hospital, Port Jefferson; Consulting Orthopaedic Surgeon Stamford Hospital, Stamford, Conn.

HOWARD LILIENTHAL, M.D.,

Professor of Clinical Surgery, Department of Surgery, Visiting Surgeon to Bellevue and Mt. Sinai Hospitals, Consulting Surgeon to the Har Moriah and Jewish Maternity Hospitals, and the Hospital for Deformities and Joint Diseases.

LEWIS GREGORY COLE, M.D.,

Professor of Roentgenology.

JOHN C. TORREY, A.B., Ph.D.,

Professor of Hygiene.

GEORGE H. KIRBY, B.S., M.D.,

Professor of Clinical Medicine, Department of Psychiatry, Director Psychiatric Institute of the New York State Hospitals, Ward's Island.

OSCAR M. SCHLOSS, B.S., M.D.,

Professor of Clinical Medicine, Department of Pediatrics, Attending Pediatricist to New York Nursery and Child's Hospital.

R. FOSTER KENNEDY, M.D., F.R.S. (Edin.),

Associate Professor of Clinical Medicine, Department of Neurology, Visiting Physician to the Neurological Institute, Visiting Neurologist to Bellevue Hospital.

HENRY H. M. LYLE, M.D.,

Assistant Professor of Surgery, Attending Surgeon to St. Luke's Hospital.

JAMES MORLEY HITZROT, A.B., M.D.,

Professor of Clinical Surgery, Department of Surgery, Associate Attending Surgeon New York Hospital.

WILLIAM H. SHELTON, M.D.,

Assistant Professor of Clinical Medicine, Department of Medicine.

MALCOLM GOODRIDGE, M.D.,

Assistant Professor of Medicine, Assistant Attending Physician to Bellevue Hospital.

PERCY R. TURNURE, A.M., M.D.,

Assistant Professor of Clinical Surgery, Attending Surgeon to the French Hospital and to the House of Relief, Associate Attending Surgeon to New York Hospital, Consulting Surgeon to the Bedford State Reformatory and to St. Faith's Hospital, Tarrytown, N. Y.

HORACE W. FRINK, M.D.,

Assistant Professor of Clinical Medicine, Department of Neurology, Adjunct Assistant Visiting Neurologist to Bellevue Hospital.

JOSEPH P. HOGUET, M.D.,

Assistant Professor of Clinical Surgery, Visiting Surgeon to the House of Relief and French Hospital, Associate Surgeon to the Ruptured and Crippled, and Assistant Surgeon to the Memorial Hospital.

CARY EGGLESTON, M.D.,

Assistant Professor of Pharmacology.

FACULTY OF MEDICINE

JEREMIAH S. FERGUSON, M.S., M.D.,

Assistant Professor of Clinical Medicine, Department of Pediatrics, Director of Pediatrics Gouverneur Hospital, Assistant Attending Physician Willard Parker Hospital.

NELLIS B. FOSTER, M.D.,

Assistant Professor of Medicine, Associate Attending Physician to New York Hospital.

JOHN C. A. GERSTER, M.D.,

Assistant Professor of Clinical Surgery.

CHARLES V. MORRILL, A.M., Ph.D.,

Assistant Professor of Anatomy.

ROBERT CHAMBERS, JR., A.M., Ph.D.,

Assistant Professor of Anatomy.

ELISE S. L'ESPERANCE, M.D.,

Assistant Professor of Pathology.

ARTHUR H. CILLEY, M.D.,

Assistant Professor of Clinical Surgery, Department of Orthopaedic Surgery, Visiting Orthopaedic Surgeon Sea View Hospital, Assistant Surgeon Hospital for the Ruptured and Crippled, Consulting Orthopaedic Surgeon Volunteer and Nassau Hospitals.

BERNARD SAMUELS, M.D.,

Assistant Professor of Clinical Surgery, Department of Ophthalmology, Senior Assistant Surgeon New York Eye and Ear Infirmary, Visiting Ophthalmologist to the New York Institute for the Education of the Blind.

LECTURERS

MAX EINHORN, M.D.,

Lecturer on Diseases of the Stomach.

JOHN T. MACCURDY, M.D.,

Lecturer on Clinical Medicine, Department of Psychiatry.

DAYTON J. EDWARDS, Ph.D.,

Lecturer on Physiology.

SAMUEL GOLDSCHMIDT, Ph.D.,

Lecturer on Physiology.

GEORGE W. HAWLEY, A.B., M.D.,

Lecturer on Fractures.

ROBERT A. COOKE, M.D.,

Lecturer on Applied Immunology.

INSTRUCTORS AND ASSISTANTS

H. JEANETTE ALLEN, A.B.,

Associate in Chemistry.

HARRY L. ALEXANDER, A.B., M.D.,

Instructor in Medicine.

HARRY BAKWIN, M.D.,

Laboratory Assistant, Department of Pediatrics.

HAROLD C. BAILEY, M.D.,

Instructor in Obstetrics.

CORNELL UNIVERSITY MEDICAL COLLEGE

- IRVIN BALENZWEIG, A.B., M.D.,
Assistant in Applied Anatomy.
- DAVID P. BARR, A.B., M.D.,
Instructor in Medicine.
- BENJAMIN S. BARRINGER, A.B., M.D.,
Instructor in Clinical Surgery, Department of Urology.
- DAVID N. BARROWS, A.B., M.D.,
Instructor in Clinical Surgery, Department of Gynecology.
- W. H. BAUGHMAN, M.D.,
Assistant in Immunology.
- FENWICK BEEKMAN, M.D.,
Assistant in Clinical Surgery.
- ABRAHAM J. BELLER, B.S., M.D.,
Instructor in Operative Surgery.
- ELLIS M. BLACK, A.M., M.D.,
Associate in Chemistry.
- RICHARD W. BOLLING, M.D.,
Assistant in Clinical Surgery.
- EDWARD C. BRENNER, M.D.,
Instructor in Operative Surgery.
- WALTER H. BRUNDAGE, M.D.,
Instructor in Medicine.
- EMILY T. BURR, A.M.,
Assistant in Pathology.
- ETHAN F. BUTLER, M.D.,
Assistant in Clinical Surgery.
- CHARLES S. B. CASSASSA, A.B., M.D.,
Assistant in Pathological Anatomy.
- RUSSEL L. CECIL, M.D.,
Instructor in Medicine.
- ALFRED CHANUTIN, Ph.B.,
Assistant in Physiology.
- CLARENCE O. CHENEY, M.D.,
Instructor in Clinical Medicine, Department of Psychiatry.
- ARTHUR F. COCA, M.D.,
Instructor in Immunology.
- BRADLEY COLEY, M.D.,
Assistant in Clinical Surgery.
- JAMES DENTON, M.D.,
Assistant in Pathological Anatomy.
- BERNARD S. DENZER, M.D.,
Pathologist, Department of Pediatrics.
- GUILFORD S. DUDLEY, A.B., M.D.,
Assistant in Clinical Surgery.
- CHARLES E. FARR, M.D.,
Instructor in Surgery.

FACULTY OF MEDICINE

- LILLIAN K. P. FARRAR, A.B., M.D.,
Instructor in Clinical Surgery, Department of Gynecology.
- ELIZABETH FRANKE, Ph.D.,
Instructor in Chemistry.
- RUSSELL S. FERGUSON, A.B., M.D.,
Assistant in Pathological Anatomy.
- RALPH EUGENE HERENDEN, M.D.,
Instructor in Roentgenology.
- ARTHUR L. HOLLAND, M.D.,
Instructor in Clinical Medicine.
- MARJORIE HUPPER, A.B., M.S.,
Assistant in Chemistry.
- HOWARD S. JECK, M.D.,
Instructor in Clinical Surgery, Department of Urology.
- NANCY JENISON, A.B., M.D.,
Instructor in Medicine.
- KENNETH JOHNSON, A.B., M.D.,
Instructor in Surgery.
- MORTON C. KAHN, B.S., A.M.,
Instructor in Hygiene.
- JAMES H. KENYON, B.S., M.D.,
Instructor in Clinical Surgery.
- WINIFRED KIRK, A.B.,
Assistant in Anatomy.
- LEILA C. KNOX, A.B., M.D.,
Instructor in Surgical Pathology.
- CHARLES LANG, M.D.,
Instructor in Clinical Medicine, Department of Pediatrics.
- NILS P. LARSEN, B.S., M.D.,
Instructor in Medicine.
- JOHN D. LYTTLE, A.B., M.D.,
Instructor in Clinical Pathology.
- WILLIAM S. McCANN, A.B., M.D.,
Instructor in Medicine.
- PENELOPE MARSH, A.B.,
Bacteriologist, Department of Surgery.
- EDWARD MILTIMORE, M.D.,
Instructor in Medicine.
- HENRY MULLER, A.B., M.D.,
Assistant in Pathology.
- H. MURAYAMA,
Preparateur in Anatomy.
- CHARLES HALPIN NAMMACK, M.D.,
Instructor in Clinical Medicine.
- THOMAS PALMER NASH, A.M.,
Instructor in Chemistry.

CORNELL UNIVERSITY MEDICAL COLLEGE

JOSEPHINE B. NEAL, A.B., M.D.,
Assistant in Medicine.

JOSE F. NONIDEZ, Sc.D.,
Instructor in Anatomy.

JOHN M. O'CONNOR, M.D.,
Instructor in Operative Surgery.

E. OSTERBERG,
Instructor in Chemistry.

ROYCE PADDOCK, M.D.,
Assistant in Clinical Medicine.

S. DOUGLAS PALMER, A.B., M.D.,
Assistant in Anatomy.

GEORGE PAPANICOLAOU, Ph.D., M.D.,
Instructor in Anatomy.

HAROLD E. B. PARDEE, M.D.,
Instructor in Medicine.

ALFRED RAHE,
Instructor in Bacteriology.

JOHN H. RICHARDS, M.D.,
Instructor in Clinical Pathology and in Medicine.

JOSEPH C. ROPER, M.D.,
Instructor in Clinical Medicine, Department of Pediatrics.

MORTON RYDER, A.B., M.D.,
Pathologist, Department of Surgery.

JESSE SAMMIS, M.D.,
Instructor in Clinical Medicine, Department of Pediatrics.

HAROLD E. SANTEE, A.B., M.D.,
Instructor in Clinical and Operative Surgery.

LOUIS C. SCHROEDER, M.D.,
Instructor in Clinical Medicine, Department of Pediatrics.

HANS J. SCHWARTZ, M.D.,
Instructor in Clinical Pathology and Instructor in Clinical Medicine, Department of Dermatology.

MORRIS K. SMITH, M.D.,
Instructor in Surgery.

WILLIAM L. SNEED, M.D.,
Instructor in Applied Anatomy.

RALPH G. STILLMAN, M.D.,
Instructor in Clinical Medicine and Surgical Pathology.

WILLIAM PETER STRAIN, M.D.,
Instructor in Clinical Medicine, Department of Pediatrics.

LAWRENCE W. STRONG, M.D.,
Instructor in Gynecological Pathology.

FENTON TAYLOR, M.D.,
Assistant in Clinical Surgery.

FACULTY OF MEDICINE

SOMA WEISS,

Assistant in Pharmacology.

GEORGE W. WHEELER, M.D.,

Instructor in Bacteriology.

ABRAHAM O. WILENSKY, A.B., M.D.,

Instructor in Operative Surgery.

HERVEY C. WILLIAMSON, M.D.,

Instructor in Obstetrics.

DAN HITER WITT, M.D.,

Instructor in Medicine.

JAMES WORCESTER, M.D.,

Instructor in Surgery.

CLINICAL INSTRUCTORS

THOMAS K. DAVIS, M.D.,

Clinical Instructor in Medicine, Department of Neurology.

CHARLES A. DRAKE, M.D.,

Clinical Instructor in Surgery, Department of Ophthalmology.

ANDREW J. GILMOUR, M.D.,

Clinical Instructor in Medicine, Department of Dermatology.

HERBERT F. JACKSON, B.Ped., M.D.,

Clinical Instructor in Medicine, Department of Pediatrics.

AQUIN S. KELLY, M.D.,

Clinical Instructor in Surgery, Department of Ophthalmology.

WILLIAM M. KRAUS, M.D.,

Clinical Instructor in Medicine, Department of Neurology.

THOMAS E. LAVELLE, M.D.,

Clinical Instructor in Surgery, Department of Gynecology.

OSCAR L. LEVIN, M.D.,

Clinical Instructor in Medicine, Department of Dermatology.

GEORGE B. McÄULIFFE, A.B., M.D.,

Clinical Instructor in Surgery, Department of Otology.

WALTER C. MONTGOMERY, M.D.,

Clinical Instructor in Surgery, Department of Laryngology and Rhinology.

CLARENCE B. OBERNDORF, M.D.,

Clinical Instructor in Medicine, Department of Neurology.

MAX S. ROHDE, A.B., M.D.,

Clinical Instructor in Surgery, Department of Urology.

WILLIAM L. SOULE, A.B., M.D.,

Clinical Instructor in Anaesthesia.

FREDERICK W. STECHMANN, M.D.,

Clinical Instructor in Medicine, Department of Neurology.

RICHMOND STEPHENS, M.D.,

Clinical Instructor in Surgery, Department of Orthopaedic Surgery.

JUNIUS W. STEPHENSON, M.D.,

Clinical Instructor in Medicine, Department of Neurology.

CORNELL UNIVERSITY MEDICAL COLLEGE

- GEORGE S. STEVENSON, M.D.,
Clinical Instructor in Medicine, Department of Psychiatry.
- PHILIP STIMSON, A.B., M.D.,
Clinical Instructor in Medicine, Department of Pediatrics.
- JULIUS J. VALENTINE, M.D.,
Clinical Instructor in Surgery, Department of Urology.
- GEORGE W. VANDEGRIFT, A.M., M.D.,
Clinical Instructor in Surgery, Department of Ophthalmology.
- MAY G. WILSON, M.D.,
Clinical Instructor in Medicine, Department of Pediatrics.
- LUCIUS A. WING, B.S., M.D.,
Clinical Instructor in Surgery, Department of Surgery.
- BENNO MAURICE WRONKER, A.B., M.D.,
Clinical Instructor in Medicine, Department of Pediatrics.

CLINICAL ASSISTANTS

- STEWART L. CRAIG, M.D.,
Clinical Assistant in Surgery, Department of Otology.
- WILLIAM V. HEALEY, A.B., M.D.,
Clinical Assistant in Surgery, Department of Orthopædic Surgery.
- HAROLD HERMAN, A.B., M.D.,
Clinical Assistant in Medicine, Department of Pediatrics.
- THOMAS A. MULCAHY, M.D.,
Clinical Assistant in Surgery, Department of Otology.

OFFICERS OF ADMINISTRATION

- WALTER L. NILES, M.D., *Dean.*
- J. S. FERGUSON, M.S., M.D., *Secretary of the Faculty.*
- J. THORN WILLSON, *Managing Clerk.*
- JESSIE P. ANDRESEN, *the Dean's Secretary.*
- JOSEPHINE GENUNG NICHOLS, Ph.B., *Librarian.*
- WILLIAM DUNN, *Photographer.*
- EDWARD MILTIMORE, M.D., *College Physician.*

DISPENSARY STAFF

Department of Medicine

Chief of Clinic.

WILLIAM H. SHELDON.

Physicians.

- WALTER H. BRUNDAGE, M.D. ARTHUR L. HOLLAND, M.D.
EDWARD MILTIMORE, M.D.

FACULTY OF MEDICINE

Assistant Physicians.

NANCY JENISON, M.D.	GUILFORD S. DUDLEY, M.D.
M. W. MARSLAND, M.D.	ARTHUR S. McQUILLAN, M.D.
H. HAROLD FELLOWS, M.D.	S. WEINTRAUB, M.D.
FENTON TAYLOR, M.D.	JOHN CAMPBELL HOWARD, M.D.

Department of Surgery

Chief of Clinic.

LUCIUS A. WING, M.D.

Assistant Surgeons.

GUILFORD S. DUDLEY, M.D.	ETHAN P. BUTLER, M.D.
FENTON TAYLOR, M.D.	DAVID HENRY ORGEL, M.D.

Department of Gynæcology

Chief of Clinic.

DAVID N. BARROWS, M.D.

Assistant Surgeons.

HADLEY T. CANNON, M.D.	GERARD L. MOENCH, M.D.
RUFUS T. REID, M.D.	ODGEN F. CONKEY, M.D.

Department of Urology

Surgeons.

JULIUS J. VALENTINE, M.D.	MAX S. ROHDE, M.D.
---------------------------	--------------------

Assistant Surgeons.

SAMUEL A. MOSS, M.D.	J. R. FLANIGEN, M.D.
FRANK N. DEALY, M.D.	E. GARNSEY BROWNELL, M.D.
ARCHIE L. DEAN, M.D.	MAURICE MELTZER, M.D.

DANIEL SCHULTHEIS, M.D.

Department of Neurology

Chief of Clinic.

C. P. OBERNDORF, M.D.

Assistant Physicians.

SWEPSON J. BROOKS, M.D.	F. W. STECHMANN, M.D.
J. W. STEPHENSON, M.D.	WALTER M. KRAUS, M.D.
JOHN SHIVEY, M.D.	DOUGLAS EATON, M.D.
THOMAS K. DAVIS, M.D.	DREW M. WARDNER, M.D.

OLGA NYMAN, D.D.S.

Department of Psychiatry

Chief of Clinic.

CLARENCE O. CHENEY, M.D.

Physician.

JOHN T. MACCURDY, M.D.

Assistant Physicians.

RALPH P. FOLSOM, M.D.	LEONARD BLUMGART, M.D.
GEORGE W. MILLS, M.D.	GEORGE S. STEVENSON, M.D.

CORNELL UNIVERSITY MEDICAL COLLEGE

Department of Dermatology

Chief of Clinic.

HANS J. SCHWARTZ, M.D.

Physicians

ANDREW J. GILMOUR, M.D.

O. L. LEVIN, M.D.

Assistant Physicians

S. FELDMAN, M.D.

D. H. STOUGHTON, M.D.

Department of Otology

Chief of Clinic.

GEORGE B. McAULIFFE, M.D.

Surgeon

THOMAS A. MULCAHY, M.D.

Assistant Surgeon.

ARTHUR PALMER, M.D.

Department of Laryngology and Rhinology

Chief of Clinic.

WALTER C. MONTGOMERY, M.D.

Surgeons.

ROBERT C. HOWARD, M.D.

THOMAS A. MULCAHY, M.D.

Assistant Surgeon.

ARTHUR PALMER, M.D.

Department of Orthopædic Surgery

Chief of Clinic.

ARTHUR H. CILLEY, M.D.

Assistant Physicians

JOHN S. WARE, M.D.

NATHANIEL P. BREED, M.D.

SYDNEY R. TITSWORTH, M.D.

Department of Roentgenology

Chief of Clinic.

RALPH E. HERENDEN, M.D.

Department of Ophthalmology

Surgeons

GEORGE W. VANDEGRIFT, M.D.

BERNARD SAMUELS, M.D.

CHARLES A. DRAKE, M.D.

Assistant Surgeons

JESSE B. STARK, M.D.

M. L. BERLINER, M.D.

M. C. EDMUNDS, M.D.

Department of Drugs and Supplies

Pharmacist.

GUSTAVE T. RUCKERT, Ph.G.

Assistant Pharmacist.

CHARLES LENZ, Ph.G.

GENERAL STATEMENT.

GENERAL STATEMENT.

The Medical Department of Cornell University was made possible by the gift to the University of a commodious and fully equipped building designed for medical instruction, and by the bestowal of funds for the maintenance of a vigorous school of medicine.

The objects of this school are:

- (1) To develop physicians of the best type, and
- (2) To conduct researches into the nature and cure of disease.

The school offers educational and research facilities to all undergraduates and graduates in medicine who are properly qualified to benefit from these opportunities and who are in sympathy with these aims.

The Main College Building comprises a Medical School and Dispensary, with principal entrance on First Avenue, opposite Bellevue Hospital, and occupies the entire block between Twenty-seventh and Twenty-eighth Streets on First Avenue. The building is devoted to the Departments of Anatomy, Clinical Pathology, Chemistry, Pathology, Bacteriology, Physiology, Medicine and their laboratory equipment.

The Loomis Laboratory (founded 1886 by the same munificent hand) serves the purpose of undergraduate instruction, in connection with the laboratories in the College building. It has also been reorganized as a research laboratory, and special departments have been established in bacteriology, physiological chemistry, experimental medicine, and pharmacology.

The College Dispensary, located in the main College building, is fully equipped for purposes of instruction.

The attendance in the Dispensary averages about 400 patients daily and annually includes about 15,000 new patients. The organization is such as to bring the Dispensary into closest touch with the laboratory and research facilities of the College. In the Department of Medicine, especially, students are assigned to a continuous service in the Dispensary.

The Department of Radiology as well as the Laboratory of Clinical Pathology, is in direct connection with the Dispensary, and by coöperation and coördination of work their services are placed at the constant disposal of the various other departments of the Dispensary for the diagnosis and investigation of disease and for purposes of instruction.

The Library is supplied with current periodicals in German, French, English and Italian, which include nearly all the more important journals in the field of medical science, and the back files of these periodicals are fairly complete. Every effort is made to maintain a library commensurate with the needs of the College. A special reading room is provided for the convenience of students. A trained Librarian is in attendance to supply references and direct their work.

In addition to the College Library, students enjoy certain privileges at the Library of the New York Academy of Medicine, 17 West 43rd Street, the second largest medical library in the United States, and at the various public libraries of the city.

CORNELL UNIVERSITY MEDICAL COLLEGE

New York Hospital.—The Medical College, through the courtesy of the Governors of the New York Hospital, has long been accorded certain privileges for instruction in its wards; but on the first of January, 1913, a definite arrangement was established between Cornell University and the New York Hospital, through the donation to the hospital of a generous fund by Mr. George F. Baker, a Governor of the Hospital, upon the condition that thereafter half the entire medical, surgical and the pathological services of the institution should be definitely assigned to the Cornell University Medical College for the advancement of its teaching and research.

By this most advantageous arrangement the University nominates the Visiting Staff of its division and the Laboratory Staff and secures the admission of its students to the wards as clinical clerks, thereby enabling the College to make a definite provision in its course of instruction and research for work in the New York Hospital. Furthermore, the Laboratory Staffs of the different departments of the Medical College are placed at the service of the Hospital for the purpose of extending its scientific work.

The hospital service thus assigned to the College comprises 100 beds. This service is exceedingly active. It includes several thousand acute and emergency cases brought in annually from a large ambulance and dispensary district.

The medical staff of this hospital assigned to the Cornell University Medical College has been organized as outlined in the departmental announcements for medicine and surgery.

The Professors of Medicine and Surgery are directly responsible to the University for the conduct of the instruction in the New York Hospital.

Bellevue Hospital.—This hospital, located on First Avenue, directly opposite the Main College building, has 1,200 beds, and receives 24,000 patients annually.

The hospital is organized in four divisions, one of which has been placed by the Trustees of the hospital at the disposal of the Faculty of the Cornell University Medical College for medical instruction. The services thus intrusted to the College include, continuously, 90 medical beds, 90 surgical beds, 60 to Urology, a Neurological Service, and for one-half the year 54 obstetrical beds, together with equal privileges with the other three divisions, giving continuous opportunity for instruction and research in the additional wards devoted to the treatment of alcoholic diseases, tuberculosis and the psychopathic diseases. There are also available 60 beds for instruction in Gynecology by members of the staff assigned to this duty by the Cornell University Medical College.

The visiting staff of the Second, or Cornell Division is drawn entirely from the Faculty and instructors of the College, and by coöperation with the Medical Board of the Hospital this division has been organized with a view to the best interests of the patients, as well as with a view to furnishing adequate facilities for instruction. The students spend a considerable portion of the fourth year in this hospital as clinical or surgical "clerks," and during the preceding years frequent clinical instruction is conducted in its wards, as fully described under "Details of the Plan of Instruction."

GENERAL STATEMENT.

While Bellevue Hospital is provided with an elaborate Department of Pathology of its own, the scope of the hospital work of the Cornell Division is broadened by the intimate relation existing between the laboratories of the Medical College and the medical service of the hospital. In addition to the staff provided by the hospital, the College maintains a corps of research workers and special assistants who conduct their routine examinations in extension laboratories equipped by the College in rooms adjacent to the wards of the hospital, and who consummate their major investigations in the more completely equipped laboratories of the College building.

The Professors of Medicine and Surgery are directly responsible to the University for the conduct of the instruction in Bellevue Hospital.

Memorial Hospital.—Through the generosity of the late Dr. James Douglas, who provided the Hospital an endowment for the study and treatment of cancer and allied diseases, the Memorial Hospital became affiliated in 1914 with Cornell University Medical College.

The conditions upon which this union was consummated place upon Cornell University Medical College the responsibility for the medical and surgical activities of the Hospital, subject however, so far as administrative action is concerned, to the approval of its Board of Managers. Cornell University Medical College is required to approve the five medical members of the Board of Managers of the Memorial Hospital and to nominate their successors in case of vacancies, and to name the medical and surgical staff, subject to the approval of the Board of Managers of the Hospital.

In accordance with these conditions, and with the approval of the Board of Managers of the Hospital, the Medical Staff has been organized as follows:

JAMES EWING, M.D., *President of the Medical Board, Director of Cancer Research, Pathologist.*

WILLIAM COLEY, M.D., *Vice-President of the Medical Board, Professor of Cancer Research, Attending Surgeon.*

WILLIAM S. STONE, M.D., *Clinical Director.*

STANLEY R. BENEDICT, Ph.D., *Director Department of Chemistry.*

WILLIAM A. DOWNES, M.D., *Attending Surgeon.*

HENRY H. JANEWAY, M.D., *Attending Surgeon.*

BURTON J. LEE, M.D., *Attending Surgeon.*

BENJAMIN S. BARRINGER, M.D., *Attending Surgeon Urological Department.*

DOUGLAS QUICK, M.D., *Attending Surgeon.*

JOSEPH P. HOGUET, M.D., *Assistant Surgeon.*

NATHAN GREEN, M.D., *Assistant Surgeon.*

FRANK E. ADAIR, M.D., *Assistant Surgeon.*

HARVEY H. M. GILLESPIE, M.D., *Assistant Surgeon.*

DAVID C. WILLIAMSON, M.D., *Assistant Gynecologist.*

LLOYD F. CRAVER, M.D., *Assistant Physician.*

CHARLES J. GOELLER, M.D., *Adjunct Assistant Surgeon, Urological Department.*

RALPH E. HERENDEN, M.D., *Physician to Roentgen Ray Department.*

CORNELL UNIVERSITY MEDICAL COLLEGE

ARCHIE L. DEAN, JR., M.D., *Adjunct Assistant Surgeon, Urological Department.*

CHARLES W. STROBELL, M.D., *Clinical Assistant.*

FREDERICK M. JOHNSON, M.D., *Clinical Assistant.*

HOWARD F. MCCANDLISH, M.D., *Clinical Assistant.*

THOMAS L. BENNETT, M.D., WILLIAM DORAN, M.D. and H. CLIFTON LUKE, M.D., *Anæsthetists.*

GIACCHINO FAILLA, *Physicist.*

RUTH THEIS, A.B., *Chemist.*

KANEMATSU SUGUIRA, A.M., *Associate Chemist.*

ELISE S. L'ESPERANCE, M.D., *Serologist.*

JOHN C. TORREY, M.D., *Bacteriologist.*

HALSEY J. BAGG, Ph.D., *Research Fellow in Biology.*

The Neurological Institute.—By courtesy of the Neurological Institute section work in Nervous Diseases is offered to third and fourth year students in the wards and Out-Patient Department of this hospital, the students being assigned for ward work in small sections during the third and fourth years. The Neurological Institute is a hospital of considerable size, devoted to the care of nervous diseases and possessing a complete equipment for neurological examination, diagnosis and treatment.

Psychiatric Institute, Ward's Island.—The Professor of Psychiatry is Director of the Psychiatric Institute, which is the teaching and research center for the entire New York State Hospital system. The lecture rooms, pathological material and clinical facilities of the Institute are available for the teaching of medical students.

Manhattan State Hospital, Ward's Island.—This hospital for the care and treatment of mental diseases, accommodates over 5,000 patients. Through the courtesy of the Superintendent the Professor of Psychiatry is enabled to utilize this clinical material for bedside study of patients and practical exercises and demonstrations conducted in the wards of the hospitals.

In addition to the above, members of the Faculty of Cornell University Medical College hold appointments in various hospitals and dispensaries of the city, and are thus enabled to utilize for teaching purposes a great quantity and variety of clinical material. This is used from time to time as necessity or opportunity arises. The major part of the bedside and clinical instruction is, however, purposely conducted in Bellevue Hospital, which is directly opposite the College, and in New York Hospital, which is conveniently located on Fifteenth Street, and may be reached by surface cars in fifteen to twenty minutes.

REQUIREMENTS FOR ADMISSION.

The Faculty of the Cornell University Medical College are of the opinion that candidates for admission to the medical profession should possess the liberal culture and general education implied by a college degree in Arts or Science. Since 1907 a standard of admission which requires the baccalaureate degree or its equivalent has been rigidly maintained. Without attempting to enter into a discussion of the relative advantages of the courses in Science or Arts, the President and Trustees of Cornell University adopted the requirements advised by the Faculty of the Medical College for admission to the course leading to the degree of M.D. and *only the following classes of candidates are admitted to the Cornell University Medical College:*

I. Graduates of approved colleges or scientific schools; *or—*

II. Seniors in good standing in approved colleges or scientific schools upon condition that their faculty will permit them to substitute the first year in the Cornell University Medical College for the fourth year of their college course, and will confer upon them the bachelor's degree* upon the satisfactory completion of the year's work; *or—*

III. Persons who give evidence by examinations that they have acquired an equivalent education to that signified by a bachelor's degree, and training sufficient to enable them to profit by the instruction offered in the Medical College.

All Candidates for Admission, whether of group I, II, or III, shall have satisfactorily completed in an approved college, at least the following minimum in—

1. Physics, 8 semester hours, including laboratory.

2. Chemistry, 12 semester hours (8 hours of inorganic, including both qualitative and quantitative analysis,† and 4 hours of organic chemistry). The course should have included at least fifty hours of didactic work not less than eighty hours of laboratory work in inorganic chemistry; and at least 70 hours each of laboratory work in *qualitative* and in *quantitative analysis*.‡ In addition, the candidate shall have satisfactorily completed courses in at least 36 hours of didactic and 80 hours of laboratory work in *organic chemistry*.

3. Biology (Zoölogy), 6 semester hours, including laboratory work.

4. English, 6 semester hours.

*No student under this clause is permitted to enter the second year of the medical curriculum without the bachelor's degree obtained after at least three years of undergraduate college work. This clause is intended to provide for those students who by specially directed or by specially proficient work accomplish the essential requirements for a B.S. or B.A. degree during three years of College residence.

†In 1921 applicants without quantitative analysis will be accepted provided they register for and satisfactorily complete a course of 70 hours in the chemical laboratories of the Cornell University Medical College. The course begins on Sept. 12th, 1921, at 9 A. M. An additional fee of \$15.00 is required.

CORNELL UNIVERSITY MEDICAL COLLEGE

5. Modern language, 6 semester hours—French, German, Italian or Spanish.
6. Two additional semester hours of college credit will be required in each of the three subjects, Biology, English and Modern language, in which no introductory high school course was offered for admission to college.

7. All applicants residing within 50 miles of New York City are expected to present their credentials *in person* by appointment at the office of the Secretary.

IV. Since September, 1920, all students entering Cornell University Medical College are required to provide themselves with a satisfactory microscope.

V. Not more than sixty students each will be registered in the second, third and fourth year classes.

VI. The number of students in this Medical College having been limited that its advantages may be equalized to all parts of the state and country, not more than five students from any one college will be admitted to the first year class.

The Trustees felt that it was unfair to refuse the exceptional student of unusual abilities who has obtained independently an education equivalent to that implied by a degree from a college or scientific school, and there will therefore be examiners appointed from the faculties in the different colleges of Cornell University to determine the qualifications of such as may apply for admission under Rule III of these requirements. The committee in charge of the administration of this rule consists of the President of the University and the Deans of the Faculties of Arts and Sciences and of Medicine. The only instance of admission under Rule III yet encountered involved a graduate of a foreign institution of collegiate rank which grants no degrees.

APPLICATIONS FOR ADMISSION.

All applications and communications are to be addressed to the Secretary of the Medical College from whom blank forms of application for admission may be obtained.

Prospective students will often find it to their advantage to file their application early in the Spring. The number of admissions being limited, to insure favorable consideration, *applications for admission to the first year should be received not later than July 1st.*

Inasmuch as all students of medicine in New York State are required by law to have previously had an adequate preliminary education, and as this preliminary education must be certified to as sufficient by the State Educational Department, it is advisable that applicants for admission send their credentials to the Secretary of the Medical College in properly attested form as early as possible, that the secretary may then obtain the requisite "medical student's certificate" from the State authorities.

ADMISSION TO ADVANCED STANDING.

Applicants for advanced standing must have met in full the requirements for admission (page 23), and must have already attended the legally re-

REQUIREMENTS FOR ADMISSION.

quired number of sessions in an approved regular medical college. Whenever vacancies arise* applicants thus qualified may be admitted to the Cornell University Medical College under the following conditions:

1. A properly attested certificate of actual attendance at a registered Medical College for the full number of years of medical study for which time credit is asked must be presented and approved.

2. A certificate showing that the student has satisfactorily completed in an approved medical college the work of all required subjects of the years for which Cornell credit is asked must be presented and approved.

3. Subject credit may be granted on presentation and approval by the heads of departments of properly attested certificates stating the courses already completed in an approved medical college with the number of hours, didactic and laboratory, devoted thereto, together with the name of the instructor.

4. In the absence of approval of the certificate called for in the preceding paragraph (number 3) subject credit for advanced standing will be granted only by examination.

For a list of the subjects for examination see page 79.

Examinations for admission to advanced standing are conducted by heads of departments and may be taken with the class at the end of the session in June or prior to the opening of the session in September. These examinations will begin at 9. A.M. on May 31st and September 20th, 1921.

ADMISSION TO SPECIAL COURSES.

Graduates in medicine, or students who desire to pursue a special course without graduation, are admitted to registration as special students, after approval by the head of the department conducting the course. Such special courses do not count in any way as part of the four years' course required of candidates for the degree of doctor in medicine. The courses offered to graduates are outlined on pages 83 to 86. Further information regarding such courses, fees, etc., may be obtained by addressing the Secretary of the Cornell University Medical College, First Avenue, 27th and 28th Streets, New York.

REQUIREMENTS FOR LICENSE TO PRACTICE MEDICINE IN THE STATE OF NEW YORK.

Graduates of Cornell University are admitted unconditionally to the examinations for license to practice medicine in the State of New York. Further information as to the nature of the requirements of the New York State

*The three upper classes are limited to sixty students each. See Rule V, page 24.

CORNELL UNIVERSITY MEDICAL COLLEGE

law regulating the practice of medicine may be obtained by consulting the handbook issued for gratuitous distribution by the New York State Education Department at Albany, N. Y.

All requirements for admission to examinations for licensure should be filed with the State Education Department at least one week before examination.

Examinations for license to practice medicine in this State will be held as follows:

1921	1922	1923	1924	1925
Jan. 24-27	Jan. 23-26	Jan. 29-Feb. 1	Jan. 28-31	Jan. 26-29
May 23-26	May 22-25	May 21-24	May 19-22	May 18-21
June 27-30	June 26-29	June 25-28	June 23-26	June 22-25
Sept. 26-29	Sept. 25-28	Sept. 24-27	Sept. 22-25	Sept. 21-24

Places.

New York, Albany, Syracuse, Buffalo.

NATIONAL BOARD OF MEDICAL EXAMINERS.

Graduates of the Cornell University Medical College are admitted to the examinations of this Federal Board, whose certificates are accepted by the Surgeons-General of the Army, Navy and Marine Corps of the United States and by the Boards of Medical Licensure of many States. The dates and places of examination will be announced as promulgated by the Board.

CHARGES FOR INSTRUCTION.

First Year.

Registration	\$10.00
Tuition	300.00
Laboratory fees	35.00
	—————\$345.00

Second Year.

Tuition	\$300.00
Laboratory fees	35.00
	—————\$335.00

Third Year.

Tuition	\$300.00
Laboratory fees	35.00
	—————\$335.00

Fourth Year.

Tuition	\$300.00
Laboratory fees	25.00
Final Examination fee.....	25.00
	—————\$350.00

The registration fee is payable only once, on entrance.

The final examination fee is payable on registering for graduation. All other fees are payable at the beginning of the term, but in special cases they may be paid semi-annually in advance. No rebate will be made in any case.

No remission of laboratory fees will be made because of previous instruction elsewhere in the subjects.

LOCATION AND MODE OF ACCESS.

Each student is required to pay the clerk of the College the following amounts to cover breakage in the Laboratories and Dispensary departments:

1st year, Laboratory and Dispensary.....	\$10.00
2d year, Laboratory and Dispensary.....	10.00
3d year, Laboratory and Dispensary.....	10.00
4th year, Laboratory and Hospital	10.00

A deposit of \$5 will be required of each student who desires to withdraw books from the library.

These deposits, less the amount charged for breakage, will be returned at the end of each year.

All fees for instruction are paid to the office of the Managing Clerk.

Tickets must be taken out and paid for at the beginning of the session.

For Fees of Special Students see pages 83 to 86.

For Fees of Graduates Students see page 90.

LOCATION AND MODE OF ACCESS.

The main building of Cornell University Medical College is located on First Avenue between 27th and 28th Streets.

The street railway cars of the Third Avenue System on First Avenue pass the College building. The crosstown cars on Twenty-third and Thirty-fourth Streets, at First Avenue, pass within five blocks of the College buildings. Convenient stations of the Subway lines are located at Twenty-eighth Street and Fourth Avenue at Twenty-eighth Street and Broadway and Twenty-eighth Street and Seventh Avenue. The nearest stations of the Manhattan Elevated Railroad are at Twenty-eighth Street on the Third and Sixth Avenue lines and at Twenty-third Street on the Second Avenue line.

GENERAL STATEMENT OF THE PLAN OF INSTRUCTION.

The function of a Medical Department in a University is primarily to produce practitioners of medicine of the highest possible efficiency. The school must include among its students not only those whose life is to be spent in the treatment of disease, but those who intend to become teachers of medicine or of the branches of natural science upon which medicine depends, as well as those who devote their energies to advancing these sciences by research and to work connected with the public service. The Medical Department of the University has therefore developed into a school whose students are to be prepared to become practitioners of medicine and surgery, teachers of these subjects and their subsidiary branches, and investigators of biological problems which pertain to human disease and "preventive medicine." To reach this ideal, and to relieve the Medical Department from instruction in subjects which belong to natural science in general and not strictly to the medical curriculum, it is necessary that the students should have received the best possible preliminary education, which must include the mental training implied by the *bacclaureate degree*.

In arranging the course of study the subjects pertaining to pure, rather than applied, science are grouped in the first year of the medical course, those of the applied science in the early part of the second year, and the so-called clinical subjects in the second, third and fourth years.

The fourth year of the medical curriculum is devoted largely to clinical instruction in the various aspects of medicine and surgery, with bedside instruction and ample opportunity for the careful study of cases by continuous service in the hospital wards. Some opportunity for elective courses is allowed, but all students must take at least the minimum amount of the subjects which form the basis of the general practitioner's usefulness, and all are thus necessarily prepared for successfully undergoing the usual competition for appointments as hospital internes, positions in the public service of the State and Nation, and examinations for licensures by the States.

Any student of exceptional fitness, however, after having completed the first three years' work and who then desires to devote the major part of his time to one or more of the laboratory departments may do so during the fourth year. Such an arrangement can be made only with the approval of the Dean and the heads of the departments concerned. The departments in which the student is engaged shall then determine whether his work has given such satisfaction as would warrant the degree at the end of the year.

Custom and experience are in favor of a long summer vacation, and the utilization of the cool months alone for teaching. The Faculty have therefore decided on a period of thirty-two actual working weeks exclusive of the time occupied by holidays and examinations. This working period is

GENERAL STATEMENT OF THE PLAN OF INSTRUCTION.

divided into three terms, the first of eleven, the second of ten, and the third of eleven weeks. By this arrangement it is possible to obtain a certain degree of "concentration" in the teaching of those subjects in which that plan is advantageous, and it is thus also possible to maintain a proper sequence in the curriculum.

In the first year anatomy, histology, embryology and advanced chemistry occupy the entire first and second terms. Neurological anatomy and histology, physiological chemistry and physiology complete the year.

In the second year the first term is occupied by topographical and special anatomy, the physiology of respiration, circulation, secretion and an advanced course in nutrition. Pharmacy and pharmacology are begun and are carried to completion in the following term.

In the second term the laboratory course in general microscopical pathology and demonstrations in pathological anatomy are begun. The course in bacteriology occupies the entire afternoon daily throughout this term. Medicine and surgery are here introduced by a weekly clinic and recitations, followed by bedside sections.

In the third term special pathology is studied in the microscopical laboratory and demonstrations in pathological anatomy are continued. Physical diagnosis is taught by lectures, clinics and dispensary sections. An intensive course in laboratory hygiene with field excursions is offered. Obstetrics and Gynæcology are introduced by a weekly clinical conference.

In the third year the required minimum of instruction in the specialties takes precedence over other exercises in the afternoons of the first term. Small sections of students are instructed in the College Dispensary and in the various hospitals in the fundamentals of Ophthalmology, Urology, Otolaryngology, Dermatology, Pediatrics, Neurology, Psychiatry, Obstetrics, Gynæcology and Orthopedics, additional opportunity being offered for advanced elective work in the fourth year. Instruction in each course is at this time confined to the more important phases with which the general practitioner of medicine or surgery should be familiar. Laboratory courses completing Pathology and Clinical Pathology occupy the morning hours.

In the second and third terms laboratory courses in surgical anatomy and operative surgery are provided. The work in medicine and surgery is carried forward by lectures, clinics, and daily sections in physical and surgical diagnosis, and by recitations, for which the class is divided into small sections.

In the fourth year the class is divided into sections and each student is assigned for two months to the medical and surgical wards of Bellevue and New York Hospitals, for intensive instruction in medicine and surgery. During this period there are no conflicting exercises the entire time of the student being devoted to the clinical clerkship to which he is assigned.

Each student devotes three half days per week for another month to similar work in the specialties, Orthopedics, Neurology, Pediatrics and three-fourths time for two weeks each in Gynæcology and Urology.

CORNELL UNIVERSITY MEDICAL COLLEGE

In order to provide for the extensive courses as clinical clerks in Medicine, Surgery and their allied specialties the services of the Cornell Division of New York Hospital and of the Second Division of Bellevue Hospital, which are under the exclusive control of Cornell, have been organized under the direction of the Professors of Medicine and Surgery, giving continuous periods of service throughout the College year to those of the Faculty who form their visiting Staffs. The Staff is augmented by an ample corps of assistant visiting physicians and research workers selected from among the assistant professors, instructors and laboratory workers of the Medical School.

The student is thus introduced directly to the work of the hospital ward, and by continuous service is enabled to study a considerable number of cases from their admission to the hospital to their completion. The student is required to examine patients and record histories which become part of the hospital records, make physical examinations and diagnoses of the patients consigned to their care, to perform clinical examinations in the laboratories of the hospital and college under the direction of a trained instructor from the Department of Clinical Pathology, and to become thoroughly proficient in the history of the diseases met in the wards of a large hospital. This work is carried on under the immediate direction of the Professors of Medicine and Surgery, and under the constant supervision of a corps of instructors which includes the entire Cornell staff of New York and Bellevue Hospitals and instructors and research workers of the medical school, from its laboratories of Pathology, Bacteriology, Clinical Pathology, Experimental Medicine, Chemistry and Physiology.

Following the clerkships is a period of two months at the end of the course during which the student may devote his entire time to such work as he elects. The student thus has the opportunity to further pursue his studies in those subjects which have especially interested him earlier in his medical course. During this period each student is expected to devote his entire time, amounting to not less than thirty hours a week, to the subjects of his choice. His standing in the elective work is rated on the usual University basis, being an estimation of the student's ability to apply himself in an independent way to some advanced problem.

The extensive opportunity for continuous ward work afforded by the curriculum of the third and fourth years in no wise replaces the valuable work afforded by hospital internship, but is in a way preparatory thereto. Every graduate of this medical school is expected to pursue the usual interne service in some hospital, our graduates having little or no difficulty in obtaining the best positions under competitive examination in addition to those appointments directly and indirectly controlled by this College. Without prolonged hospital training no physician should attempt to practice or to teach; and no specialist can be worthy of the name who has not had the broad foundation insured by such a service.

DETAILS OF THE PLAN OF INSTRUCTION.

THE DEPARTMENT OF ANATOMY.

CHARLES R. STOCKARD, M.S., Ph.D., Sc.D., *Professor of Anatomy.*

CHARLES V. MORRILL, A.M., Ph.D., *Assistant Professor of Anatomy.*

ROBERT CHAMBERS, JR., A.M., Ph.D., *Assistant Professor of Anatomy.*

GEORGE PAPANICOLAOU, Ph.D., M.D., *Instructor in Anatomy.*

WILLIAM L. SNEED, M.D., *Instructor in Applied Anatomy.*

JOSE F. NONIDEZ, Sc.D., *Instructor in Anatomy.*

S. DOUGLASS PALMER, A.B., M.D., *Assistant in Anatomy.*

H. MURAYAMA, *Preparateur in Anatomy.*

WINIFRED KIRK, A.B., *Assistant in Anatomy.*

IRVIN BALENZWEIG, A.B., M.D., *Assistant in Applied Anatomy.*

I. Morphology.

Structure of Man.—This course considers the structure of the various organs and systems of the human body in the light of their variations and evolutions. The relationship of the parts of the organs and systems are also explained by numerous facts gathered from experimental morphological studies on lower vertebrates.

The chief aim is to instill into the student the idea that animal structures are constantly changing and varying, yet are so definite as to lend themselves to logical analysis.

Laboratory, 40 hours (elective), and demonstration conferences, 22 hours (required).

Text-books.—Wiedersheim's *Comparative Anatomy and Bau des Menschen*, Wilder's *History of Man*, together with special works and monographs on the subject.

Professor Stockard.

II. Embryology and Histology.

In this course the intra-uterine development of the human body, the histogenetic differentiation of its organs and the adult microscopic structures of the latter are studied.

The work in *embryology* presupposes a general course in the subject and embraces a thorough study of the development of the organs and systems in the bird, pig and human embryo.

Special attention is devoted to those stages of development at which abnormalities, monsters and tumor-like inclusions are most likely to occur. The causes of such anomalies are considered in the light of experimental embryology. The student is directed in collateral reading on these topics.

In that part of the course devoted especially to *general histology* the various types of tissues are studied systematically, both in the fresh condition and by means of stained sections.

The third part of the course comprises a detailed study of *systematic histology*. The work is conducted so that the histology of every organ appears as the final stage of its embryology. Fresh, teased material, as well as stained preparations, are used extensively. The structures of the entire body, with the exception of the central nervous system (see Neuro-histology) are covered.

A part of the course is devoted to the training of the students in *histological technique*, viz., the preparation of tissues for microscopic examination. A special feature of this part of the course is to train the students in the diagnosis of different organs.

Laboratory course and lectures—250 hours, October to March. Required of all first year students.

Text-books.—Prentiss, *Laboratory Manual and Text-book of Embryology*; Lewis, *Text-book of Histology*; Quain's *Anatomy*, Vols. I and II; Minot, *Laboratory Text-book of Embryology*; Keibel and Mall, *Human Embryology*; Sobotta, *Atlas of Microscopic Anatomy*; Broman, *Normal and Abnormal Embryology*; Kollmann, *Atlas of Embryology*.

Assistant Professor Chambers, Dr. Nonidez and assistants.

III. Neuro-Anatomy.

A laboratory course on the gross and microscopic anatomy of the human central nervous system. Especial emphasis is laid on the more important pathways and their functions.

Laboratory and demonstrations, 88 hours. Required of all first year students during the third term.

Text-books.—Ranson, *Anatomy of the Nervous System*, Villiger's *Brain and Spinal Cord*, Herrick's *Introduction to Neurology* and any of the text-books of anatomy used in Course IV.

Assistant Professor Morrill and Dr. Nonidez.

IV. Gross Anatomy of the Human Body.

This is taught by means of laboratory exercises and dissections held in the dissecting room at stated hours.

The following are the courses required:

COURSE I. THE UPPER EXTREMITY.

COURSE II. THE HEAD AND NECK.

COURSE III. THE LOWER EXTREMITY.

COURSE IV. THE THORAX.

COURSE V. THE ABDOMEN AND PELVIS.

The required work in each of the above courses includes:

(a) Dissection of the part.

(b) Demonstrations, study, and recitations upon dissected and prepared specimens, and from standard text-books.

(c) An oral examination at the completion of each course.

Total laboratory hours, 288 (minimum). First and second terms of the first year.

COURSE VI. A DEMONSTRATION COURSE. Optional for the first-year stu-

DETAILS OF THE PLAN OF INSTRUCTION.

dents. Demonstrations upon the cadaver, models and dissected preparations amplifying the courses in dissection during the first and second terms of the first year.

COURSE VII. STUDY ROOM COURSE IN LIVE ANATOMY.

Since the ultimate aim of dissection is to acquaint the student not merely with the arrangement of structures in the cadaver, but with the facts of the living body, this course follows as a natural sequence to the work of the dissecting room. Optional to first-year students.

COURSE VIII. DISSECTION REVIEW.

The work covers a repetition of Courses I-V, giving an opportunity for advanced dissection. Optional to students of the second, third or fourth year. Afternoons.

COURSE IX. TOPOGRAPHICAL ANATOMY.—A study of the relations and topography of the parts of the body by means of frozen sections. Cleared preparations and living models are also used. Members of the class must submit a number of drawings made from the sections.

Laboratory, 99 hours. Required during the first term of second year.

Text-books.—Cunningham's *Manual of Practical Anatomy*, two vols.; Cunningham's *Text-book of Anatomy*; Spalteholz's *Atlas of Human Anatomy*; Morris' *Human Anatomy*; Grey's *Anatomy*; Piersol's *Human Anatomy*.

Professors Stockard, Morrill and assistants.

V. Applied Anatomy.

This course is given during the second term of the third year. It is conducted as a laboratory exercise and aims to demonstrate the important facts or regional and topographical anatomy as applied to the practice of medicine and surgery.

Laboratory, 60 hours.

Text-books.—Woolsey's *Applied Surgical Anatomy*; Davis' *Applied Anatomy*.

Drs. Sneeds, Palmer and Balenzweig.

VI. Elective Courses Preparatory to the Specialties.

Optional for students of the third and fourth years. These courses offer a thorough review of the embryology, histology and gross anatomy of the following organs and systems:

- (a) The eye.
- (b) The ear.
- (c) The face and neck, including especially the nose and accessory sinuses, the mouth and salivary glands, pharynx and larynx, thyroid and parathyroid glands.
- (d) The genito-urinary system, male and female.
- (e) The brain and spinal cord.

CORNELL UNIVERSITY MEDICAL COLLEGE

(f) The thorax and abdomen.

(g) The extremities, especially the joints and their mechanics.

Laboratory, 40 hours. Professor Stockard and instructors.

VII. Elective Courses for Advanced Students.

COURSE I. GENERAL HISTOLOGY.—This course will comprise a study of the various types of tissues which form the several organs of the vertebrate body. The structures will be studied not only from the mere morphological standpoint, but the various biological problems involved will be taken into consideration. The close relationship between structure and function will be elucidated.

Twenty lectures, March to June.

Registration not later than January. Assistant Professor Chambers.

COURSE II. THE ANATOMY OF THE INFANT.—A course of lectures amplified by demonstrations and the study of preparations.

Twenty lectures arranged for in advance. Professor Stockard.

COURSE III. DEVELOPMENT ARRESTS AND STRUCTURAL DEFICIENCIES.—A discussion of the imperfections in development which may occur during various periods from the maturation of the germ cells, fertilization of the egg on through embryonic and fetal development.

Fifteen lectures. Professor Stockard.

COURSE IV. EXPERIMENTAL EMBRYOLOGY.—These lectures begin with the history of the subject and the various aspects of the problems concerned. The experimental analysis of embryological processes is then considered from the several points of view.

Twenty lectures with conferences considering the recent literature of the subject. March to June. Professor Stockard.

COURSE V. REGIONAL ANATOMY.—This course will comprise a thorough review by means of dissections, demonstrations and reading of the gross anatomy, histology and development of selected regions of the body and of organs and organ systems.

Laboratory and demonstration, 3 half days a week for two months.

Assistant Professor Morrill and assistants.

COURSE VI. FOURTH-YEAR ELECTIVES.—The Department of Anatomy will arrange a schedule of work to fit individual cases for a limited number of *fourth-year students* desiring to devote the major part or all of their elective time. Such work will be designed, in cases where sufficient time is available, to equip the student for positions as laboratory assistant.

VIII. Anatomical Research.

To students desiring to pursue research in anatomical subjects the equipment of the entire department is available. Members of the staff will gladly assign subjects and direct the progress of advanced work of this type. The work may be elected by students who enter with advanced credits, or by any student who has completed the preliminary courses in descriptive anatomy, histology and embryology. The course is also open to graduates in medicine or biology.

DETAILS OF THE PLAN OF INSTRUCTION.

SUMMARY.

	<i>First Year.</i>	<i>Second Year.</i>	<i>Third Year.</i>
Morphology	22 hours	.....	.....
Embryology and Histology... 250 hours	.....	.....	.....
Gross Anatomy	308 hours	.....	.....
Topographical Anatomy	99 hours	.....	.....
Neuro-Anatomy	88 hours	.....	.....
Applied Anatomy . . . . .	.....	.....	60 hours

PHYSIOLOGY.

GRAHAM LUSK, Ph.D., *Professor of Physiology.*

D. J. EDWARDS, Ph.D., *Lecturer in Physiology.*

SAMUEL GOLDSCHMIDT, Ph.D., *Lecturer in Physiology.*

ALFRED CHANUTIN, Ph.B., *Assistant in Physiology.*

First Year. Nervous System and Respiration.

Lectures, laboratory, recitations and a weekly seminar. Physiology of the muscle and nerve, the central nervous system, the special senses and respiration.

Second Year. General Physiology and Nutrition.

Lectures, laboratory, recitations and seminar. Circulation, secretion, digestion, internal secretions and metabolism.

SUMMARY.

	<i>First Year.</i>	<i>Second Year.</i>
Lectures	33 hours	66 hours
Recitations	44 "	28 "
Seminar . . . . .	.....	11 "
Laboratory	99 "	99 "

Text-books.—Howell's or Starling's *Physiology*; Lusk, *Science of Nutrition*; Wiggers, *Circulation in Health and Disease*; Collateral Reading, Scientific Journals.

CHEMISTRY.

STANLEY R. BENEDICT, Ph.D., *Professor of Chemistry.*

THOMAS PALMER NASH, A.M., *Instructor in Chemistry.*

ELIZABETH FRANKE, Ph.D., *Instructor in Chemistry.*

EMIL OSTERBERG, *Instructor in Chemistry.*

ELLIS M. BLACK, A.M., M.D., *Associate in Chemistry.*

H. JEANETTE ALLEN, A.B., *Associate in Chemistry.*

MARJORIE HUPPER, A.B., M.S., *Assistant in Chemistry.*

The instruction in chemistry is concentrated in the first year, and is arranged upon the assumption that the student is already thoroughly grounded in the principles of chemistry and in physics. The object aimed at is to impart that fundamental knowledge of organic and physiological chemistry which is necessary to the comprehension of the bearings of chemistry upon physiology, pharmacology and medicine.

CORNELL UNIVERSITY MEDICAL COLLEGE

Lectures.—There will be two lectures a week during the first term upon physical chemistry. The elements of the subject will be presented with special emphasis upon the properties and reactions of colloids, and the theory of indicators. Roentgen and radium rays are also discussed.

During the second term two lectures a week will be devoted to organic chemistry. The lectures will discuss groups of compounds of especial biological importance, emphasizing especially the carbohydrates, purines, amino acids and the fats.

In the third term three lectures weekly will be devoted to Physiological Chemistry.

Recitations and Conferences.—There will be one recitation weekly during the second term and two weekly during the third. These recitations are largely in the nature of a conference.

Laboratory Work.—During the first term there will be one session weekly of three and one-half hours in physical chemistry. The experiments are designed to familiarize the student with the fundamental properties of electrolytes and colloids, and to study the phenomena of osmosis and dialysis. Methods of hydrogenion determination are also studied.

In the second term there will be one session weekly of two and one-half hours in organic chemistry. This work will be directed mainly to the preparation and examination of organic compounds of biological importance, and will furnish practice on those points in which laboratory manipulations are desirable.

During the third term there will be three three-hour laboratory sessions in physiological and clinical chemistry. This course will include the study of the reactions of the carbohydrates, fats and proteins; of the composition of the salivary, gastric, pancreatic and intestinal secretions and the bile, and their actions in digestion; of the fæces, urine, blood and milk; and of the examination of pathological fluids, concretions, stomach contents, etc. The study of metabolism will receive particular attention. The arrangement of this course is in coaptation with those in physiology and in clinical pathology.

In the laboratory courses each student is supplied with all apparatus and chemicals required.

Chemical Pathology.—Elective in the fourth year. A practical course in the chemical analysis of the blood. The laboratory work is supplemented by informal lectures and discussions. Hours to be arranged.

One period a week will be devoted to a seminar in which recent literature on blood chemistry will be discussed.

Research.—The laboratory will be open during "optional hours" to students of any year who desire to prosecute advanced work or research, subject to the regulations of the office.

SUMMARY.		<i>First Year.</i>
Recitations		32 hours
Laboratory		168 hours
Lectures		75 hours

DETAILS OF THE PLAN OF INSTRUCTION

Text-books.—McCollum, *Organic Chemistry*, for students of Medicine and Biology; Moore, *Laboratory Manual*; Hawk, *Practical Physiological Chemistry*, fifth edition. For Collateral Reading:—Mathews, *Physiological Chemistry*; Wells, *Chemical Pathology*.

PHARMACOLOGY

ROBERT ANTHONY HATCHER, Ph.G., M.D., *Professor of Pharmacology*.

CARY EGGLESTON, M.D., *Assistant Professor of Pharmacology and Instructor in Therapeutics*.

SOMA WEISS, *Assistant in Pharmacology*.

Work in this department is offered during the second year.

Materia Medica and Pharmacy.

I. Elementary Pharmacy, Toxicology and Principles of Prescription Writing.—The work in this course occupies four hours a week during the first trimester. Twenty hours will be devoted to the consideration of crude drugs, and making pharmacopœial preparations of the different pharmaceutical classes (such as extracts, pills, etc.,) by the students. Each laboratory exercise will be preceded by an informal discussion of the work to be done and its relation to therapeutics.

The remainder of the course will be devoted to prescription writing and incompatibilities.

Pharmacology.

II. Lectures.—During the second and third trimesters forty-five hours will be devoted to lectures, conferences and written reviews on Systematic Pharmacology. The lectures will be illustrated in part by demonstrations and by tracings taken from research experiments. Professor Hatcher.

III. Laboratory.—Concurrently with the lectures on Systematic Pharmacology, ninety hours will be devoted to the laboratory study of the subject. The experiments are designed to illustrate a wide range of pharmacologic actions, the more important drugs being considered with reference to their actions on different structures. Professors Hatcher and Eggleston.

IV. Research. Elective.—Students will be encouraged to conduct original research under the supervision of the members of the staff. Such work affords a valuable insight into pharmacologic methods, and assists in the formation of a correct estimate of the original work of others.

SUMMARY.

Second Year.

Lectures	32 hours
Laboratory	126 hours

Text-book.—Solimann, *A Text-book of Pharmacology*.

CORNELL UNIVERSITY MEDICAL COLLEGE

MEDICINE.

LEWIS A. CONNER, M.D., *Professor of Medicine.*
EUGENE F. DUBOIS, M.D., *Associate Professor of Medicine.*
NELLIS B. FOSTER, M.D., *Assistant Professor of Medicine.*
MALCOLM GOODRIDGE, M.D., *Assistant Professor of Medicine.*
WILLIAM C. THRO, M.D., *Professor of Clinical Pathology.*
WALTER L. NILES, M.D., *Professor of Clinical Medicine.*
FRANK S. MEARA, M.D., *Professor of Clinical Medicine.*
ALEXANDER LAMBERT, M.D., *Professor of Clinical Medicine.*
CHARLES E. NAMMACK, M.D., *Professor of Clinical Medicine.*
WILLIAM H. SHELDON, M.D., *Assistant Professor of Clinical Medicine.*
MAX EINHORN, M.D., *Lecturer on Diseases of the Stomach.*
DAVID P. BARR, M.D., *Instructor in Medicine.*
JOHN H. RICHARDS, M.D., *Instructor in Clinical Pathology and Medicine.*
HAROLD E. B. PARDEE, M.D., *Instructor in Medicine.*
EDWARD MILTIMORE, M.D., *Instructor in Medicine.*
NANCY JENISON, M.D., *Instructor in Medicine.*
WALTER H. BRUNDAGE, M.D., *Instructor in Medicine.*
HANS J. SCHWARTZ, M.D., *Instructor in Clinical Pathology.*
RALPH G. STILLMAN, M.D., *Instructor in Clinical Medicine.*
ARTHUR L. HOLLAND, M.D., *Instructor in Clinical Medicine.*
HARRY L. ALEXANDER, M.D., *Instructor in Medicine.*
CHARLES H. NAMMACK, M. D., *Instructor in Clinical Medicine.*
WILLIAM S. MCCANN, M.D., *Instructor in Medicine.*
RUSSELL L. CECIL, M.D., *Instructor in Medicine.*
NILS P. LARSEN, M.D., *Instructor in Medicine.*
DAN H. WITT, M.D., *Instructor in Medicine.*
JOHN D. LYTTLE, M.D., *Instructor in Clinical Pathology.*
JOSEPHINE B. NEAL, M.D., *Assistant in Medicine.*
ROYCE PADDOCK, M.D., *Assistant in Clinical Medicine.*

The course in Medicine is begun in the second trimester of the second year and is continued uninterruptedly through the third and fourth years. Instruction is given by means of didactic lectures, laboratory exercises, amphitheatre clinics, recitation, section classes in the wards and in the College Dispensary and clinical clerkships in the wards of Bellevue and New York Hospitals.

SECOND YEAR.

Introductory Clinics.—The subject of Medicine is introduced in the second trimester by a series of elementary clinics designed to acquaint the student with the simpler and more obvious aspects of important and common types of disease and to stimulate in him the habit of close observation. These clinics are held by Professors Conner and DuBois once a week during the second and third trimesters.

Recitations.—The student is required to read upon the subjects considered in each of the clinics and to attend one recitation a week dealing with these subjects.

DETAILS OF THE PLAN OF INSTRUCTION.

Physical Diagnosis.—During the third trimester the principles of physical diagnosis are presented in demonstrations and conferences by Doctor Pardee, and the students, in small sections, are given training in the various methods of physical examination. Only normal subjects are examined and the importance of a thorough familiarity with normal physical signs under varying conditions is insisted on.

Ward Classes.—In the third trimester the introductory clinics are supplemented by bedside teaching to small sections in the wards of Bellevue Hospital by Professors Lambert and Nammack.

THIRD YEAR.

Lectures.—During the first and second trimesters one lecture a week is given by Professor Conner upon the general symptomatology of disease. Each of the commoner and more important symptoms is considered in detail with special reference to the physiological processes involved.

Physical Diagnosis.—This subject is continued in the third year during the second and third trimesters. The class is divided into small groups, each of which in turn is assigned to service in the medical clinic of the College Dispensary. The students, under careful supervision, are expected to take histories and to make and record physical examinations; and systematic instruction in pathological physical diagnosis is given by Professor Foster and Doctors Brundage and Jenison.

Clinics.—In the first and third trimesters general medical clinics are held once a week in the College Dispensary or in Bellevue Hospital by Professor Conner. During the first term these consist chiefly of clinical conferences upon diseases of the gastro-intestinal tract, in which the roentgenological findings are presented by Doctor Holland and the surgical aspects of the cases are discussed by Professors Hartwell and Woolsey. In the third term are presented such ambulatory types of medical diseases as are usually not seen in the hospital wards. In this trimester also a medical clinic is held once a week in Bellevue Hospital for both the third and fourth year students by Professor DuBois.

Recitations.—In this year the subject of Medicine is covered systematically and thoroughly by recitations which are held three times a week during the second and third trimesters. Doctors Barr and Richards.

Therapeutics.—Instruction in therapeutics, under the charge of Professor Goodridge, will be given throughout the third year, and will comprise:

Lectures, dealing with the theories and modes of therapy, including serum and vaccine therapy, the treatment of hay fever and bronchial asthma, various metabolic disturbances, and the therapeutic management of definite types of disease, so designed as to direct the student in the application of his pharmacologic knowledge to therapeutic problems. Professors Meara, Foster, Goodridge, Eggleston, Cooke and Cecil. 32 hours.

CORNELL UNIVERSITY MEDICAL COLLEGE

Recitations and Conferences, which will deal with the treatment of the acute infections. Professor Goodridge. 16 hours.

Practical Demonstrations, to small sections, in the wards of Bellevue Hospital, of such therapeutic procedures as are suitable for this form of instruction. Professor Goodridge. 16 hours.

Clinical Clerkships: In the fourth year, students will be assigned to the wards of Bellevue Hospital, to serve as clinical clerks, for periods of four weeks each, during two weeks of which especial emphasis will be given to instruction in various therapeutic procedures.

Clinical Pathology.—The introductory required course, under the charge of Professor Thro, is given in the first trimester of the third year. It consists of one hundred and ten hours of lectures and laboratory work. This time is devoted to the teaching and the practical application of methods for the examination of urine, blood and blood serum, sputum, exudates and transudates, spinal fluid, gastric contents, fæces, and for the bacteriological examination of clinical material.

During the remainder of the third year and in the fourth year the students perform laboratory tests on patients assigned them in the clinics and hospitals, where they are supervised by instructors in the Department of Medicine.

In the latter part of the fourth year students have the opportunity to elect work in Clinical Pathology.

FOURTH YEAR.

Clinical Clerkships.—The time allotted to medicine in the last year is devoted entirely to practical work in the wards of New York and Bellevue Hospitals and to elective subjects. Each student is required to serve for a period of two months as clinical clerk in the medical wards; the time being divided equally between New York and Bellevue Hospitals. During this period his entire day is spent in the wards and clinical laboratories. A certain number of patients are assigned for study to each student. Under careful supervision he takes the histories, makes physical examinations, performs the various necessary laboratory examinations and records the progress of the cases. He is expected to be present at all post mortem examinations and to attend the clinical pathological conferences. Each afternoon teaching rounds for the entire group on duty are made by some members of the Attending Staff.

At the New York Hospital, in addition to the routine ward teaching by Professors Conner and Foster, a weekly conference by Professor Foster is held with the group upon disorders of metabolism and their treatment, as exemplified by cases in the wards; a course of eight periods on the fluoroscopic investigation of the gastro-intestinal tract is given by Doctor Holland, and a part of one afternoon of each week is devoted by Doctor Pardee to the study of cardiac arrhythmias and the interpretation of electrocardiographic and polygraphic records.

At Bellevue Hospital, in addition to the routine ward teaching by Pro-

DETAILS OF THE PLAN OF INSTRUCTION.

fessors DuBois, Niles and Goodridge, the following special exercises are held:

- a. Neurological clinic, once a week, Professor Kennedy.
- b. Clinical-pathological conference, once a week.
- c. Medical Clinic, one a week. Cases are presented by the student clerks and are discussed by the staff, and the results of experimental work done by the research members of the staff are demonstrated in connection with the cases studied.
- d. Library conferences. The group on duty meet once a week in the college library where instruction is given in the use of the reference library and in looking up the literature of special subjects.

Elective Studies.—The latter part of the fourth year is available for elective work. For courses offered see page 63.

Graduate Study and Research.—The clinics and laboratories of Bellevue and New York Hospitals are available for special study and research to a limited number of physicians possessing suitable training.

Bellevue Hospital Clinic.—The Russell Sage Institute of Pathology is especially equipped for the investigations of problems of basal metabolism. The calorimeter is operated in conjunction with a metabolism ward and there is a chemical research laboratory for the study of problems connected with respiration and the gases of the blood.

New York Hospital Clinic.—The clinical laboratory and chemical laboratory are closely allied with the wards and offer excellent facilities for the study of the chemical aspects of disease. Special lines of research may also be carried on in the serological and bacteriological laboratories of the Hospital in conjunction with clinical observation in the wards. These laboratories have been used notably in the study of the anæmias, nephritis, and protein sensitization.

SUMMARY.

Medicine.

	<i>Second Year.</i>	<i>Third Year.</i>	<i>Fourth Year.</i>
Lectures .....	.....	21 hours	.....
Recitations	21 hours	63 hours	.....
Clinics	42 hours	55 hours	.....
Clinical Clerkships .....	.....	.....	336 hours*
Sections	32 hours	20 hours	.....

Therapeutics.

Lectures .....	.....	32 hours	.....
Recitations .....	.....	16 hours	.....
Sections .....	.....	16 hours	.....

Clinical Pathology.

Laboratory, recitations & lectures 110 hours.

* Includes Therapeutics.

CORNELL UNIVERSITY MEDICAL COLLEGE

SURGERY.

- CHARLES L. GIBSON, M.D., *Professor of Surgery.*
JOHN A. HARTWELL, M.D., *Associate Professor of Surgery.*
HENRY H. M. LYLE, M.D., *Assistant Professor of Surgery.*
GEORGE WOOLSEY, M.D., *Professor of Clinical Surgery.*
JOHN ROGERS, M.D., *Professor of Clinical Surgery.*
IRVING S. HAYNES, M.D., *Professor of Clinical Surgery.*
ALFRED S. TAYLOR, M.D., *Professor of Clinical Surgery.*
HOWARD LILIENTHAL, M.D., *Professor of Clinical Surgery.*
BURTON J. LEE, M.D., *Professor of Clinical Surgery.*
JAMES MORLEY HITZROT, M.D., *Professor of Clinical Surgery.*
PERCY R. TURNURE, M.D., *Assistant Professor of Clinical Surgery.*
JOSEPH P. HOGUET, M.D., *Assistant Professor of Clinical Surgery.*
JOHN C. A. GERSTER, M.D., *Assistant Professor of Clinical Surgery and
Operative Surgery.*
GEORGE W. HAWLEY, M.D., *Lecturer on Fractures.*
JAMES WORCESTER, M.D., *Instructor in Clinical Surgery.*
JAMES H. KENYON, M.D., *Instructor in Clinical Surgery.*
HAROLD E. SANTEE, M.D., *Instructor in Clinical and Operative Surgery.*
ELISE S. L'ESPERANCE, M.D., *Instructor in Surgical Pathology.*
KENNETH JOHNSON, M.D., *Instructor in Surgery.*
EDWARD C. BRENNER, M.D., *Instructor in Operative Surgery.*
CHARLES E. FARR, M.D., *Instructor in Surgery.*
LEILA C. KNOX, M.D., *Instructor in Surgical Pathology.*
MORRIS K. SMITH, M.D., *Instructor in Surgery.*
ABRAHAM J. BELLER, M.D., *Instructor in Operative Surgery.*
ABRAHAM O. WILENSKY, M.D., *Instructor in Operative Surgery.*
JOHN M. O'CONNOR, M.D., *Instructor in Operative Surgery.*
FENWICK BECKMAN, M.D., *Assistant in Clinical Surgery.*
GUILFORD S. DUDLEY, M.D., *Assistant in Clinical Surgery.*
RICHARD W. BOLLING, M.D., *Assistant in Clinical Surgery.*
ETHAN F. BUTLER, M.D., *Assistant in Clinical Surgery.*
FENTON TAYLOR, M.D., *Assistant in Clinical Surgery.*
BRADLEY COLEY, M.D., *Assistant in Clinical Surgery.*
LUCIUS A. WING, M.D., *Clinical Instructor in Surgery.*
WILLIAM L. SOULE, M.D., *Clinical Instructor in Anaesthesia.*
———, *Clinical Instructor in Anaesthesia.*
PENELOPE MARSH, M.D., *Bacteriologist, Department of Surgery.*
MORTON RYDER, M.D., *Pathologist, Department of Surgery.*

In the second year the introductory course in surgery consists of a series of lectures, clinics in the College Dispensary and sections in the New York, Bellevue and St. Luke's Hospitals.

In the third year recitations are continued upon regional surgery; the class is instructed in sections at the New York and Bellevue Hospitals in history taking and methods of surgical examination and diagnosis, three

DETAILS OF THE PLAN OF INSTRUCTION.

hours a week for one term, and one hour a week in minor surgery in the College Dispensary during the second term.

Formal clinics, including those on fractures and dislocations, are held in Bellevue Hospital, thirty-three lectures are given by the Professors of Surgery, and a college clinic for diagnosis is held once a week throughout the term, at which the students are required personally to examine and report upon the cases.

In the second and third terms students are instructed at the New York Hospital, where practical instruction by operative and post-operative work is given by the Professor of Surgery.

Operative Surgery. The course consists of recitations, operative work on the cadaver, and the application of bandages and plaster dressings. As the material is abundant, each member of the class will perform the principal operations.

In the fourth year students spend eight weeks as clinical clerks in the wards of the New York and Bellevue Hospitals. They receive clinical instruction in small groups in several hospitals and dispensaries on the special branches of urology, gynecology and orthopedics. In the last two months all the work is purely elective and the students have a chance to supplement their work in surgery by clinical electives and by taking some of the group of surgical lectures which are offered annually.

HOSPITAL WORK.

The Cornell University Medical College through its control of the first surgical service of the New York Hospital and the second surgical division of the Bellevue Hospital possesses every facility necessary for the efficient teaching of practical surgery and surgical pathology.

The Staff of Instruction at the New York Hospital is at present organized as follows:

NEW YORK HOSPITAL, CORNELL (FIRST SURGICAL) · DIVISION.

CHARLES L. GIBSON, M.D., *Professor of Surgery, Attending Surgeon.*

BURTON J. LEE, M.D., *Professor of Clinical Surgery, Associate Surgeon.*

JAMES M. HITZROT, M.D., *Professor of Clinical Surgery, Associate Surgeon.*

CHARLES E. FARR, M.D., *Instructor in Surgery, Associate Attending Surgeon.*

RALPH G. STILLMAN, M.D., *Instructor in Surgical Pathology, Assistant Director Department of Pathology.*

KENNETH JOHNSON, M.D., *Instructor in Surgery.*

HENRY MULLER, M.D., *Assistant in Pathology, Pathologist.*

WILLIAM L. SOULE, M.D., *Clinical Instructor in Anæsthesia, Anæsthetist.*

The work is carried on in collaboration with the additional appointees from the Department of Pathology.

The division consists of about 60 surgical beds and a variable proportion

CORNELL UNIVERSITY MEDICAL COLLEGE

of the children's service. The service is acute in character, and is particularly rich in the graver emergency and traumatic material.

Attached to this division is also a large Dispensary (Tuesday, Thursday and Saturday mornings), which furnishes valuable material for instruction and includes departments in urology, orthopedics, gynecology and dental surgery.

The resources of the Pathological Department under Professor Elser afford valuable opportunities for the study of surgical pathology, and an intimate connection between the two departments will be maintained.

Instruction as now arranged consists of bedside instruction, diagnosis, operative and post-operative clinics, practical instruction in sections (with utilization of the Dispensary clinical material) and clinical clerkships.

Surgical Clerkships.—In this course the student is encouraged to develop his work along his own initiative, while suitable supervision is furnished to insure efficiency. The students, divided into small groups, spend all of their time in the hospital for the period of their clerkship. They are assigned certain patients, and these they interrogate, make physical examinations, and carry out suitable investigations in clinical pathology. The course of each patient is studied thoroughly, both independently by the student and in connection with the Attending Staff, and at operation the student is given suitable opportunities to become familiar with the necessary technical procedures and pathological findings.

A special course in Surgical Pathology is given three times a week by Doctors Stillman and Muller.

The Second Surgical Division of Bellevue Hospital is under the care of the Cornell University Medical College. Its Staff has been organized as follows:

BELLEVUE HOSPITAL, CORNELL (SECOND SURGICAL) DIVISION.

JOHN A. HARTWELL, M.D., *Associate Professor of Surgery, Director of Surgery.*

GEORGE WOOLSEY, M.D., *Professor of Clinical Surgery, Visiting Surgeon.*

JOHN ROGERS, M.D., *Professor of Clinical Surgery, Visiting Surgeon.*

JAMES WORCESTER, M.D., *Instructor in Surgery, Associate Visiting Surgeon.*

HAROLD E. SANTEE, M.D., *Instructor in Clinical Surgery, Associate Visiting Surgeon.*

ELISE S. L'ESPERANCE, M.D., *Instructor in Surgical Pathology, Surgical Pathologist.*

ETHAN F. BUTLER, M.D., *Assistant in Clinical Surgery, Adjunct Assistant Visiting Surgeon.*

GUILFORD S. DUDLEY, *Assistant in Clinical Surgery, Adjunct Assistant Visiting Surgeon.*

FENTON TAYLOR, M.D., *Assistant in Clinical Surgery, Adjunct Assistant Visiting Surgeon.*

DETAILS OF THE PLAN OF INSTRUCTION.

BRADLEY COLEY, M.D., *Assistant in Clinical Surgery, Adjunct Assistant Visiting Surgeon.*

MORTON RYDER, *Pathologist, Department of Surgery, Assistant Surgical Pathologist.*

PENELOPE MARSH, *Bacteriologist, Department of Surgery, Surgical Bacteriologist.*

The Division consists of 90 surgical beds in addition to those devoted to surgical pediatrics, genito-urinary diseases and gynecology, the hospital instruction in which is outlined under their respective departments. The service is so arranged that the Associate Professor and a Clinical Professor are on continuous duty throughout the College year.

In addition to the regular hospital appointees the College supplies a special nurse to assist in the cases under investigation and in the work of the surgical clerks. The hospital interne staff perform the routine duties of the wards, and are assisted in history taking, dressing, etc., by the surgical clerks, who spend their entire day in the wards during their period of clerkship, these privileges being extended exclusively to the students of the Cornell University Medical College.

Research workers are assigned from the laboratory of Clinical Pathology and Surgical Pathology of the College so that the more intricate problems of nutrition, serumtherapy, bacteriology, etc., arising in connection with the diagnosis and treatment of patients, may find ultimate solution in the College laboratories, thus supplementing the facilities afforded by the hospital itself.

Surgical Clerkships.—Intensive ward teaching is done under this head in the wards of Bellevue Hospital during the fourth year. The students are assigned in sections for one month each. They are under the direction of the Associate Professor aided by the corps of instruction.

Each student devotes his entire day to the work continuously for four weeks. He is assigned to the study of a certain number of patients, and is enabled to follow the complete course of the disease from the admission of the patient to his discharge. In the event of death he is present at the autopsy should one be performed.

In this way the student has an opportunity to follow to a conclusion a large number of surgical affections, and he is instructed in the proper methods of surgical history taking, surgical physical examination, surgical dressings, operative surgery as seen at the operating table. He is also instructed in the laboratory study, including bacteriology, of the blood, urine, fæces, exudates, and transudates. This laboratory work is done under the direction of the staff in the laboratories connected with the wards and in the College laboratories, and is under the immediate charge of the Surgical Pathologist to the Division. As a supplement to the above teaching, each student spends some time in the gross pathological museum, where he is instructed in a series of lesions illustrating the cases under his observation.

By this method of instruction, each student comes into intimate contact with a large number of surgical patients, and is required to make a complete study of each one from every standpoint. He has constantly at his

CORNELL UNIVERSITY MEDICAL COLLEGE

service two or more of the teaching staff to guide him in his work, and impress on him the proper methods of observation and study.

SUMMARY.

	<i>Second Year.</i>	<i>Third Year.</i>	<i>Fourth Year.</i>
Lectures	32 hours.	43 hours.	.....
Recitations	10 hours.	63 hours.	.....
Clinics	20 hours.	95 hours.	.....
Sections	20 hours.	60 hours.	.....
Operative Surgery .....	.....	55 hours.	.....
Clinical Clerkships .....	.....	.....	336 hours.
Elective .....	.....	.....	<i>Variable</i>

Text-books.—*Arnhurst's Text-book of Surgery*; Rose and Carless, *Surgery*; Choyce, *A System of Surgery*; Thompson and Miles, *Manual of Surgery*, 5th Edition, Gould, *Surgical Diagnosis*.

Collateral Reading.—Lexer-Bevan, *General Surgery*; Stimson, *Fractures and Dislocations*; Binnie, *Operative Surgery*, 5th Edition; Binnie, *Regional Surgery*.

OBSTETRICS.

J. CLIFTON EDGAR, M.D., *Professor of Obstetrics and Clinical Midwifery.*

HAROLD C. BAILEY, M.D., *Instructor in Obstetrics.*

HERVEY C. WILLIAMSON, M.D., *Instructor in Obstetrics.*

Instruction in obstetrics will be given during the second and third years by

1. Recitations. 2. Lectures. 3. Obstetric clinics and conferences. 4. Attendance upon cases of confinement. 5. Manikin practice and section work. 6. Obstetric histology, pathology, and bacteriology.

1. **Recitations** are held weekly in the second year during the third trimester, and in the third year during the second trimester.

2. **The Lectures** comprise a systematic course running through part of the second and third years, upon the physiology and pathology of obstetrics.

3. **Obstetric Clinics and Conferences.**—An obstetric clinic is held by Professor Edgar for the second and third year classes at the Manhattan Maternity and Dispensary.

4. **Attendance upon Cases of Confinement.**—Each candidate for the degree of M.D. is required to present satisfactory evidence to the effect that he has attended a definite number of cases of confinement. To fulfill this requirement students may register as internes in the Manhattan Maternity and Dispensary, 327 East 60th Street. Students are lodged in the above hospital for periods of two weeks or more, and attend confinement cases both in the hospital building and in the tenement house districts of the upper east side of the city.

During the student's attendance upon his practical maternity course he may be excused from the exercises of the College during the fourth college

DETAILS OF THE PLAN OF INSTRUCTION.

year, otherwise he shall take his practical obstetric course during vacation time. Further information concerning the practical obstetric work may be obtained by applying at the secretary's office.

5. Manikin Practice and Section Work.—Manikin practice is given to sections of the class during the third year, and consists of work by individual students upon the manikins, under the supervision and criticism of an instructor.

The sections will also be instructed at the bedside at Bellevue Hospital in the management of pregnant and parturient women, the care of the newborn child, abdominal palpation, and pelvic mensuration.

6. Obstetric Histology, Pathology, and Bacteriology.—Laboratory instruction is given in the Departments of Anatomy and Pathology upon the histology of the vulva, uterus, ligaments, Fallopian tubes, and ovaries in the pregnant and non-pregnant conditions, and upon the histology and pathology of the decidua, chorion, placenta, and umbilical cord.

SUMMARY.

	<i>Second Year.</i>	<i>Third Year.</i>
Lectures .....	.....	10 hours.
Recitations	11 hours.	.....
Clinics	22 hours.	20 hours.
Sections .....	.....	48 hours.

Text-book.—Edgar, *Practice of Obstetrics*.

DEPARTMENT OF PATHOLOGY.

**General Pathology, Pathological Anatomy, Experimental Pathology,
Chemical Pathology.**

JAMES EWING, M.D., *Professor of Pathology.*

OTTO H. SCHULTZE, M.D., *Professor of Medical Jurisprudence.*

ELISE S. L'ESPERANCE, M.D., *Assistant Professor of Pathology.*

CHARLES S. B. CASSASSA, M.D., *Assistant in Pathological Anatomy.*

HENRY MULLER, M.D., *Assistant in Pathology.*

RUSSELL S. FERGUSON, M.D., *Assistant in Pathological Anatomy.*

JAMES DENTON, M.D., *Assistant in Pathological Anatomy.*

GENERAL PATHOLOGY.

Facilities.—The department of pathology occupies the main part of the fourth floor of the college building, in which are a class room and working museum, demonstration room for pathological anatomy with refrigerating plant, a preparation room for pathological histology, one large room for special students, five private laboratory rooms for officers of the department, an animal hospital, and the library.

CORNELL UNIVERSITY MEDICAL COLLEGE

Pathological material is drawn from New York Hospital, Bellevue Hospital and the City Morgue, Memorial Hospital for Cancer and Allied Diseases, Neurological Institute, and other Hospitals.

The museum contains a selected collection of 3,000 specimens illustrating most of the common and many rare pathological lesions. It is especially rich in lesions of bones and in tumors.

The histological cabinets contain about 20,000 slides arranged anatomically and cross-indexed for special diseases. There are also 100 sets of demonstration slides for undergraduate teaching purposes.

The library contains 7,000 bound volumes of current periodicals in English, French, German and Italian, and 4,000 selected reprints and monographs. There is also a students' library of recent text-books.

An annual volume is issued jointly by the Department of Pathology, Bacteriology, and Hygiene, in which are collected the main studies coming from these laboratories. The Department of Pathology with the collaboration of heads of other departments conducts the work of the Huntington Fund for Cancer Research of the Memorial Hospital, and at appropriate times issues reports of these studies.

Instruction.—The course of instruction in pathology begins in the second term (January) of the second year with lectures, gross and microscopical demonstrations, illustrating degeneration, inflammation, repair of tissue, and the infectious granulomas. At the same time the student observes the external phenomena of disease in demonstrations conducted by the Departments of Medicine and Surgery, reads about them in text-books, and prepares recitations on these topics. Coincidentally, biweekly demonstrations of gross pathological material collected from autopsies are conducted. The introduction of each topic is made by individual demonstration of museum specimens followed by microscopical sections. Further co-ordination of work is accomplished by having the course in bacteriology proceed at the same time. The third term is occupied by the subject of tumors, and the Special Pathology of lungs, heart, liver, and kidneys. The first term of the third year is divided among the medical specialties, constitutional diseases, gynecological pathology, dermatopathology, and neuropathology.

Pathological Anatomy is continued through the three terms of the course in general pathology, and in the fourth year the student performs autopsies. Various elective courses are offered in the latter portion of the fourth year.

SYNOPSIS OF COURSES.

General Pathology.—Lectures, gross and microscopical demonstrations in:

(a) Degeneration, Inflammation, Regeneration, Granulomas, 70 hours. Required in second term of second year. (b) Tumors and Special Pathology of Lungs, Heart, Liver and Kidneys, 88 hours. Required in third term of second year. (c) Special Pathology of Constitutional Diseases, etc. Gynecological Pathology, Dermatopathology, Neuropathology, 88 hours. Re-

DETAILS OF THE PLAN OF INSTRUCTION.

quired in first term of third year. Prof. Ewing, Drs. L'Esperance, Muller and Fairbanks.

Pathological Anatomy.—Demonstrations of gross lesions in material collected from autopsies, gross pathological diagnosis, pathogenesis of symptoms and lesions. 84 hours. Required in second and third year.

Autopsy Technique.—Section teaching at Morgue. Required in fourth year. Prof. Schultze and Drs. Cassassa, Ferguson and Denton.

Medico-legal Pathology.—The medico-legal relations of pathology are extensively illustrated in the material collected in the morgue and in the museum, and special attention is devoted to this subject in the third and fourth years. Prof. Schultze and Dr. Cassassa.

Recitations, Examinations.—Written recitations are conducted monthly throughout the year. Written and practical examinations are held at the end of the second year and at the termination of the course.

Electives.—In the latter part of the fourth year the student may return to the laboratory and pursue advanced courses in several fields to be determined on consultation. The following courses are specifically recommended.

1. Pathological technique.
2. Tumor diagnosis and General Oncology.
3. Gynæcological Pathology.
4. Dermatopathology.
5. Neuropathology.
6. Surgical Pathology.
7. Special pathology and study of groups of cases with the production of a thesis.

Most of these elective courses will require the student's entire time for one to three months, but may be continued into the summer.

Special Students and Special Degrees.—Opportunity is afforded to a limited number of students to engage in original research in selected topics under the direction of an instructor. The student must contract to devote his entire time, in the usual sense, to the pursuit of the problem, and the results of the work may be published under the auspices of the department. The work may be pursued in the college laboratories, in the Loomis Laboratory, at the New York Hospital, or at the Memorial Hospital in cancer research.

Under the conditions laid down in the Graduate School of Medicine, the student may obtain the degree of Ph.D. in Pathology.

CANCER RESEARCH.

Since 1904 the work of the Huntington Fund for Cancer Research has been located in the laboratories of Cornell University Medical College under the general direction of the Department of Pathology, and with the collaboration of heads of other departments. Later through the support of Dr. James

CORNELL UNIVERSITY MEDICAL COLLEGE

Douglas, and the co-operation of the Board of Governors, it has been extended to the laboratories of the Memorial Hospital. A laboratory building accommodating pathology, chemistry and physics has recently been erected.

The organization of this work includes pathology, Prof. Ewing; bacteriology, Prof. Torrey; immunology, Dr. Coca; chemistry, Prof. Benedict; biology, Prof. Stockard; pathology, Prof. L'Esperance.

Clinical studies in the diagnosis, natural history, and treatment of neoplastic diseases are conducted in the hospital by the members of the Staff. The general conduct of the ward service is in charge of Dr. Wm. S. Stone, Clinical Director of Cancer Research. The Radium Department is in charge of Dr. H. H. Janeway, assisted in special fields by Drs. H. C. Bailey, B. S. Barringer, Burton J. Lee and others. The radium laboratory possesses four grams of radium metal, supplied by the National Radium Institute through the late Dr. James Douglas. The radium laboratory is in charge of Mr. Giacchino Failla, Physicist, and four assistants. The physics department also enjoys the services of Prof. J. S. Shearer, Consulting Physicist, Prof. Walter F. Wilcox is Consulting Statistician.

The X-ray Department is in charge of Prof. L. G. Cole, Consulting Roentgenologist, and Dr. Ralph E. Herendeen, Roentgenologist.

SUMMARY.

	<i>Second Year.</i>	<i>Third Year.</i>	<i>Fourth Year.</i>
General Pathology	70 hours	.....	.....
Special Pathology	88 hours	88 hours	.....
Pathological Anatomy	62 hours	22 hours	.....
Autopsy Technics .....	.....	.....	Variable

BACTERIOLOGY.

WILLIAM J. ELSER, M.D., *Professor of Bacteriology.*

ARTHUR F. COCA, M.D., *Instructor in Immunology.*

ROBERT A. COOKE, M.D., *Lecturer on Applied Immunology.*

GEORGE W. WHEELER, M.D., *Instructor in Bacteriology.*

ALFRED RAHE, *Instructor in Bacteriology.*

W. H. BAUGHMAN, M.D., *Assistant in Immunology.*

I. *Bacteriology.*

The subject is taught in the second year in two parts. Part I includes the preparation of culture media, the principles of sterilization and disinfection, the methods of isolation and differentiation of bacterial species and a study of their bio-chemical behaviour. Part II includes a detailed study of the pathogenic bacteria; special attention being paid to their relation to diseases of man. This work is supplemented by lectures and conferences dealing with the theoretical phases of bacteriology and immunology.

During the third trimester 11 hours are devoted to the study of the bacteriology of wounds; pathogenic anaerobic bacteria and the efficiency of common antiseptics receive special consideration.

DETAILS OF THE PLAN OF INSTRUCTION.

II. *Immunology.*

A. A didactic course in immunology with demonstrations is given to second year students following the course in bacteriology.

B. An elective laboratory course in immunology and serum study is offered to fourth year students. This course is designed primarily to familiarize the student with the fundamental immunological and serological principles. It includes also the technique involved in the recognized clinical and forensic application of those principles, viz., Widal, precipitin, Wassermann and Schick test, reciprocal blood tests, preliminary to transfusion, dermal and ophthalmic tests in hayfever and other forms of sensitization, etc.

Opportunity for practical study of various forms of hypersensitiveness in man is provided for in a special clinic at New York Hospital devoted solely to this field.

SUMMARY.

	<i>Second Year.</i>	<i>Fourth Year.</i>
Bacteriology	150 hours	.....
Immunology	20 hours	60 hours
		Elective

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY.

NEUROLOGY.

- CHARLES L. DANA, M.D., *Professor of Clinical Medicine, Department of Neurology.*
 R. FOSTER KENNEDY, M.D., *Associate Professor of Clinical Medicine, Department of Neurology.*
 HORACE W. FRINK, M.D., *Assistant Professor of Clinical Medicine, Department of Neurology.*
 CLARENCE P. OBENDORF, M.D., *Clinical Instructor in Medicine, Department of Neurology.*
 JUNIUS W. STEPHENSON, M.D., *Clinical Instructor in Medicine, Department of Neurology.*
 FREDERICK W. STECHMANN, M.D., *Clinical Instructor in Medicine, Department of Neurology.*
 WILLIAM K. KRAUS, M.D., *Clinical Instructor in Medicine, Department of Neurology.*
 THOMAS K. DAVIS, M.D., *Clinical Instructor in Medicine, Department of Neurology.*

Instruction in Neurology begins in the last semester of the Second Year. During this period the students are given instruction in the methods of examining neurological cases and made to review the anatomy and physiology of the nervous system with special reference to neurological symptoms. In the Third Year the students are given weekly clinical lectures and conferences and the class, divided into sections, is given practical instruction in the examination of cases, history-taking and electrotherapeutics, the work being done in the dispensary of the College. In the Fourth Year, the students are given clinical instruction in the Neurological wards of Bellevue Hospital, and this work is kept up until the 1st of April. In the last two months of the Fourth Year optional courses in Neurology are given.

SUMMARY.

	<i>Second Year.</i>	<i>Third Year.</i>	<i>Fourth Year.</i>
Lectures	5 hours	.....	.....
Clinics	6 hours	32 hours	.....
Sections .....	.....	3 hours	36 hours

Text-book.—Dana, *Diseases of the Nervous System.*

Collateral Reading.—Works on nervous diseases by Sachs, Starr, Church and Peterson, Jelliffe and White, Oppenheim, Bing, and Stewart.

PSYCHIATRY.

- GEORGE H. KIRBY, M.D., *Professor of Clinical Medicine, Department of Psychiatry.*

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY

JOHN T. MACCURDY, M.D., *Lecturer on Clinical Medicine, Department of Psychiatry.*

CLARENCE O. CHENEY, M.D., *Instructor in Clinical Medicine, Department of Psychiatry.*

GEORGE S. STEVENSON, M.D., *Clinical Instructor in Medicine, Department of Psychiatry.*

Instruction in psychiatry is given in the third and fourth years.

I. Eleven lectures on medical psychology which will serve as an introductory course to the study of clinical psychiatry. The student will become acquainted with the principles of abnormal mental action as it occurs in the neuroses and the psychoses.

II. Eleven lectures and eleven clinical demonstrations covering the main facts of modern psycho-pathology including the examination, observation, diagnosis and treatment of mental disorders. Special emphasis will be placed on the earliest manifestations of mental diseases and their management while under the care of the general practitioner. An effort will be made to give the student a comprehensive view of the whole field of psychiatry and to point out the importance of mental factors in all diseases and in the various social problems of the present day. The clinical demonstrations and practical exercises will be given on Ward's Island, which is reached by ferry from the foot of East 116th Street. The facilities of the Psychiatric Institute and the clinical material of the Manhattan State Hospital are available for teaching purposes.

III. A fourth year elective course will be offered to a limited number of students. This will afford an opportunity for examination and study of patients in the wards of the Manhattan State Hospital. An opportunity will be offered these students to become familiar with the various psychometric tests useful in establishing a diagnosis of mental deficiency and to apply the principles of psycho-analysis in the study of the psychoses.

SUMMARY.

	<i>Third Year.</i>	<i>Fourth Year.</i>
Lectures on Medical Psychology....	10 hours	.....
Lectures on Psychiatry	11 hours	.....
Clinics and Practical Exercises....	33 hours	.....
Advanced Psychiatry .....	.....	Elective

PEDIATRICS.

OSCAR M. SCHLOSS, M.D., *Professor of Clinical Medicine, Department of Pediatrics.*

JEREMIAH S. FERGUSON, M.D., *Assistant Professor of Clinical Medicine, Department of Pediatrics.*

JOSEPH C. ROPER, M.D., *Instructor in Clinical Medicine, Department of Pediatrics.*

WILLIAM PETER STRAIN, M.D., *Instructor in Clinical Medicine, Department of Pediatrics.*

CORNELL UNIVERSITY MEDICAL COLLEGE

LOUIS C. SCHROEDER, M.D., *Instructor in Clinical Medicine, Department of Pediatrics.*

JESSE F. SAMMIS, M.D., *Instructor in Clinical Medicine, Department of Pediatrics.*

CHARLES LANG, M.D., *Instructor in Clinical Medicine, Department of Pediatrics.*

BENNO MAURICE WRONKER, M.D., *Clinical Instructor in Medicine, Department of Pediatrics.*

HERBERT F. JACKSON, M.D., *Clinical Instructor in Medicine, Department of Pediatrics.*

MAY G. WILSON, M.D., *Clinical Instructor in Medicine, Department of Pediatrics.*

PHILLIP STIMSON, M.D., *Clinical Instructor in Medicine, Department of Pediatrics.*

HAROLD HERMAN, M.D., *Clinical Assistant in Medicine, Department of Pediatrics.*

BERNARD S. DENZER, M.D., *Pathologist, Department of Pediatrics.*

HARRY BAKWIN, M.D., *Laboratory Assistant, Department of Pediatrics.*

The aim of this department will be to give thorough instruction in the fundamental principles of Pediatrics.

The student will be given opportunity to become familiar with the diseases peculiar to infants and children, and will receive special instruction in infant feeding and hygiene, and the therapeutics of children's diseases.

Third Year. There will be a clinical lecture once a week during the second and third terms. This will comprise a systematic consideration of the subject of Pediatrics, supplemented by the demonstration of illustrative cases. The students will be assigned in sections for recitations in which the field of pediatrics will be consecutively considered.

Sections of students will be assigned to the dispensary clinic. They will examine and suggest treatment for patients under direction of the instructor in charge.

A course of instruction in acute contagious diseases will be given at the Willard Parker Hospital. The student will have opportunity to become familiar with the diagnosis, care and treatment of such diseases.

Fourth Year. The work during the fourth year will be entirely practical. Students will serve as clinical clerks in the Children's wards of the New York and Nursery and Child's Hospitals. Each student will be on duty from 2 to 5 P. M. three times a week for three weeks. This work will include a careful study of patients by the students, ward rounds and instruction by the head of the department or one of the instructors.

During the latter part of the fourth year, there will be an elective course. This will comprise work in the wards of the New York Nursery and Child's Hospital, the New York Hospital and the Willard Parker Hospital. Thirteen hours a week for four consecutive weeks will be given to this course.

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY.

SUMMARY.

	<i>Third Year.</i>	<i>Fourth Year.</i>
Clinics	42 hours	.....
Recitations	22 hours	.....
Sections	21 hours	.....
Clinical Clerkships .....	.....	36 hours
Elective .....	.....	60 hours

Text-books.—Holt, *Diseases of Infancy and Childhood*.

Collateral Reading.—Still, *Common Disorders and Diseases of Childhood*; Grulee, *Infant Feeding*; Morse and Talbot, *Diseases of Nutrition and Infant Feeding*.

GYNÆCOLOGY.

GEORGE GRAY WARD, JR., M.D., *Professor of Clinical Surgery, Department of Gynæcology.*

LILIAN K. P. FARRAR, M.D., *Instructor in Clinical Surgery, Department of Gynæcology.*

DAVID NYE BARROWS, M.D., *Instructor in Clinical Surgery, Department of Gynæcology.*

LAWRENCE W. STRONG, M.D., *Instructor in Gynæcological Pathology.*

THOMAS E. LAVELLE, M.D., *Clinical Instructor in Surgery, Department of Gynaecology.*

Instruction in Gynæcology is given during the second, third and fourth years by (1) Recitations and lectures, (2) Section teaching in the Out-Patient Department, (3) General operative clinics, (4) Section work in operative clinics, (5) Ward demonstrations and conferences, and (6) Laboratory courses, (7) Full time elective courses.

1. During the second year recitations and lectures are given in the third term. A standard text-book is used and the student is systematically taught the general principles of the subject so as to give him a foundation upon which to build his clinical knowledge. Charts, models, pathological specimens, instruments, lantern slides, etc., are used to illustrate the lectures.

2. Small sections of three or four students are drilled in methods of examination and treatment of cases in the Out-Patient Departments of the College and Bellevue and the Woman's Hospitals during the third year. In connection with the Out-Patient teaching instruction is given in gynæcological cystoscopy; the technic of endoscopy, cytoscopy, catheterizations of ureters and testing of kidney efficiency as applied to gynæcological cases.

3. A general operative clinic is held at the Woman's Hospital for the fourth year students throughout the first and second terms. Charts, black-board drawings, clay modeling, etc., are employed before the operation is begun, to teach the principles of operative gynæcology: A stereomotograph is used during the operation to throw lantern slides upon the screen to show the operative steps and to refresh the student's memory of the anatomy of the region.

CORNELL UNIVERSITY MEDICAL COLLEGE

4. Small sections permit the students acting as assistants at the operation to examine the patient under anæsthesia and thus enables them to study the detail of the operation, to write up reports, and to check up the diagnosis.

5. Ward demonstrations and conferences are held during the first and second terms of the fourth year at the Women's Hospital. The students are brought into contact with the patients they have seen at operation and are thus enabled to follow the post-operative course of each case. They take histories of patients awaiting operation and make pelvic examinations under guidance.

Methods of diagnosis are demonstrated and the appropriate treatment is outlined. Non-operative treatments are demonstrated during these conferences.

6. A course in pathological gynæcology is given by the department of Pathology during the third year. Specimens from the museum and microscopical sections of diseased tissues are demonstrated.

Lectures on gynæcological pathology and laboratory demonstrations of secretions, discharges and specimens obtained from patients who come under operation are given to sections of the fourth year class as a part of the course at the Woman's Hospital.

7. An elective course is given at the Women's Hospital during the third term of the fourth year. The course provides for four students, working under supervision, as clinical clerks and assistants in the hospital from 9 A. M. to 5 P. M. daily for one month. It includes operating room work and the study of special problems.

SUMMARY.

	<i>Second Year.</i>	<i>Third Year.</i>	<i>Fourth Year.</i>
Lectures and Recitations.....	22 hours	.....	.....
Sections .....	.....	17 hours	.....
Clinics .....	.....	.....	(Elective)
Ward Demonstrations and Conferences .....	.....	.....	102 hours
<i>Text-books.</i> —Ashton, <i>Gynæcology</i> ; Polak, <i>Gynæcology</i> ; Graves, <i>Gynæcology</i> .			

UROLOGY.

EDWARD L. KEYES, JR., M.D., *Professor of Clinical Surgery, Department of Urology.*

BENJAMIN S. BARRINGER, M.D., *Instructor in Clinical Surgery, Department of Urology.*

HOWARD S. JECK, M.D., *Instructor in Clinical Surgery, Department of Urology.*

JULIUS J. VALENTINE, M.D., *Clinical Instructor in Surgery, Department of Urology.*

MAX S. ROHDE, M.D., *Clinical Instructor in Surgery, Department of Urology.*

The courses in this department are required of students during the third and fourth year. They are designed to give instruction in diagnosis and treatment of the surgical diseases of the urinary and male genital organs.

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY.

Clinic.—Third Year. A two-hour clinic will be given in Bellevue Hospital during the second term by Professor Keyes. At this clinic typical cases are demonstrated and discussed by the students themselves. Cases are followed during their stay in the Hospital and by means of a return clinic throughout their convalescence.

Lectures.—Third year. A course of ten lectures will be given to the third-year class during the first term of the college session.

Section Teaching.—Third year. The third-year class will be divided into sections of small size for instruction in the College Dispensary during the first and second terms.

Hospital Work.—Students are assigned to clerkships in the wards of Bellevue Hospital and study the cases in the wards devoted to Urology continuously for one week. They are expected to follow these cases to a conclusion just as is done in the wards devoted to general surgery. Thus, during a service as surgical clerks, opportunity is afforded for the complete study of a considerable number of cases in the urological wards.

SUMMARY.

	<i>Third Year.</i>	<i>Fourth Year.</i>
Clinics	20 hours	.....
Sections	12 hours	.....
Lectures	11 hours	.....
Clinical Clerkships .....	.....	66 hours

Text-book.—Keyes.

Collateral Reading.—Cabot, Thompson-Walker.

DERMATOLOGY.

Dermatology.

HANS J. SCHWARTZ, M.D., *Instructor in Clinical Medicine, Department of Dermatology.* (Acting Head of the Department).

ANDREW J. GILMOUR, M.D., *Clinical Instructor in Medicine, Department of Dermatology.*

OSCAR L. LEVIN, M.D., *Clinical Instructor in Medicine, Department of Dermatology.*

Instruction in Dermatology and Syphilology will be given by Doctor Schwartz and his assistants. No teaching will be given didactically, but the cutaneous diseases will be demonstrated on the living subject. Abundance of material for such instruction is obtainable, and the student can thoroughly familiarize himself with the more common as well as with the rarer diseases of the skin by actual personal touch and observation. Attention is particularly paid to the diagnosis and the etiology of skin diseases, but their therapeutics also receive due consideration. Instruction will also be given in the intravenous and other forms of treatment by salvarsan and neosalvarsan.

CORNELL UNIVERSITY MEDICAL COLLEGE

SUMMARY.

	<i>Third Year.</i>	<i>Fourth Year.</i>
Sections	12 hours	Elective
Clinic	10 hours	Elective

Text-books.—Stelwagon, *Diseases of the Skin*; Crocker, *Dermatology*.

LARYNGOLOGY AND RHINOLOGY.

HARMON SMITH, M.D., *Professor of Clinical Surgery, Department of Laryngology and Rhinology.*

WALTER C. MONTGOMERY, M.D., *Clinical Instructor in Surgery, Department of Laryngology and Rhinology.*

The professor of the department gives instruction to the third year students by didactic lectures and clinical exercises. In this work he is assisted by the clinical instructor and his other assistants. The lectures are illustrated by plates, models and stereopticon projections.

A Practical Course for the removal of tonsils and adenoids is given each section at the Manhattan Eye, Ear and Throat Hospital.

Each student is also individually instructed in the ordinary methods of examination of the nose and throat and shown the recent measures employed in laryngoscopy and bronchoscopy.

SUMMARY.

	<i>Third Year.</i>	<i>Fourth Year.</i>
Lectures	11 hours	.....
Sections	12 hours	Elective
Clinic .....	.....	Elective

Text-books.—Wright and Smith, *Diseases of the Nose and Throat*.

Collateral Reading.—St. Clair Thomson, *Diseases of the Nose and Throat*; Knight, *Diseases of the Nose and Throat*.

OPHTHALMOLOGY.

ROBERT G. REESE, M.D., *Professor of Clinical Surgery, Department of Ophthalmology.*

BERNARD SAMUELS, M.D., *Assistant Professor of Clinical Surgery, Department of Ophthalmology.*

GEORGE W. VANDEGRIFT, M. D., *Clinical Instructor in Surgery, Department of Ophthalmology.*

CHARLES A. DRAKE, M.D., *Clinical Instructor in Surgery, Department of Ophthalmology.*

AQUIN S. KELLY, M.D., *Clinical Instructor in Surgery, Department of Ophthalmology.*

Instruction in Ophthalmology is given throughout the third year. The class is divided into small sections for work in the College Dispensary.

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY.

Each student receives individual instruction in the use of the ophthalmoscope. External diseases of the eye and anomalies of the ocular muscles are covered in a practical way. Some time is devoted to errors of refraction and the fitting of glasses.

During the latter part of the year the professor of the department gives clinical lectures to the entire class, the patients coming from the College Dispensary and the New York Eye and Ear Infirmary. These lectures are illustrated with stereopticon pictures.

Students may take Ophthalmology as an elective course, in the fourth year. To these, in addition to the clinical work, operative practice is given on the eyes of kittens. An opportunity to witness operations on the living, by the professor and the instructors, is provided at the New York Eye and Ear Infirmary. The histo-pathology of the eye is taught by microscopical sections prepared for the purpose.

SUMMARY.

	<i>Third Year.</i>	<i>Fourth Year.</i>
Sections	24 hours	.....
Clinic	11 hours	Elective

Text-book.—De Schweinitz.

Collateral Reading.—Fuchs, May.

OTOLOGY.

FREDERICK WHITING, M.D., *Professor of Clinical Surgery, Department of Otolaryngology.*

GEORGE B. McAULIFFE, M.D., *Clinical Instructor in Surgery, Department of Otolaryngology.*

STEWART L. CRAIG, M.D., *Clinical Assistant in Surgery, Department of Otolaryngology.*

THOMAS A. MULCAHY, M.D., *Clinical Assistant in Surgery, Department of Otolaryngology.*

For clinical instruction in Otolaryngology, the third-year class is divided into sections. Each student receives practical instruction in the College Dispensary from Professor Whiting and his assistants in the examination of patients, the use of the otoscope, and the various methods of testing the hearing. The student is permitted to examine patients and after a probationary period, to prescribe for them and thus gradually assume the duties of a clinical assistant. The students also have an opportunity of witnessing the more important operations in aural surgery, including intracranial complications, at the New York Eye and Ear Infirmary.

	<i>Third Year.</i>
Lectures	8 hours
Sections	12 hours

Text-book.—Bacon, *On the Ear.*

Collateral Reading.—Politzer, *Diseases of the Ear*; Macewen, *Pyogenic Infective Diseases of the Brain and Spinal Cord*; Whiting, *The Modern Mastoid Operation.*

CORNELL UNIVERSITY MEDICAL COLLEGE

ORTHOPÆDIC SURGERY.

CHARLTON WALLACE, M.D., *Professor of Clinical Surgery, Department of Orthopædic Surgery.*

ARTHUR H. CILLEY M.D., *Assistant Professor of Clinical Surgery, Department of Orthopædic Surgery.*

RICHMOND STEPHENS, M.D., *Clinical Instructor in Surgery, Department of Orthopædic Surgery.*

WILLIAM V. HEALEY, M.D., *Clinical Assistant in Surgery, Department of Orthopædic Surgery.*

Instruction in this department is carried on in the third and fourth years:

I. In the first term of the third year:

(a) Didactic and clinical lectures are given for one hour a week to the entire class in the college lecture room. Professors Wallace and Cilley.

(b) The students work in sections in the College Dispensary for ten hours in the examination and treatment of patients. Prof. Cilley.

II. In the fourth year:

(a) Each section of the class receives bedside instruction in congenital and acquired deformities in the wards of the Hospital for the Ruptured and Crippled, two mornings each week for four weeks. Dr. Stephens.

(b) One morning a week for four weeks each section receives instruction in industrial surgical conditions, at the Hospital for Industrial Surgery. Dr. Healey.

(c) Students are taught methods of examination and are required to examine the patient, giving a concise resumé of the history, diagnosis and treatment to be employed in each case. Informal recitations and discussions are held for one hour following the case work.

SUMMARY.

	<i>Third Year.</i>	<i>Fourth Year.</i>
Lectures	11 hours	.....
Sections	10 hours	.....
Ward Work .....	.....	36 hours

Text-books.—Whitman and Soutter's *Operative Orthopædics.*

ROENTGENOLOGY.

LEWIS GREGORY COLE, *Professor of Roentgenology.*

RALPH EUGENE HERENDEN, M.D., *Instructor in Roentgenology.*

The course in this department consists of the demonstration of the apparatus and the method of making Roentgen examination of various portions of the body. The time is largely spent in considering the scope and accuracy of this method of diagnosis in all branches of medicine. This will include the study and interpretation of Roentgenograms showing foreign bodies, fractures, dislocations, and bone and joint lesions, renal, ureteral, and vesical calculi and other lesions which can be detected Roentgenographically,

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY.

including pycelography. Lesions of the skull, the study of the teeth, infections of the accessory sinuses, together with the Roentgeno-diagnosis of joint lesions produced by these infections will be considered. Respiratory lesions—abscesses, tumors of the lungs, mediastinal tumors—are carefully considered, special attention being devoted to the early diagnosis of pulmonary tuberculosis.

Lesions of the gastro-intestinal tract such as strictures and diverticula of the œsophagus, and growths, kinks and adhesions of the colon will be discussed. Particular emphasis will be given to the motor phenomena of the stomach, and the physiology of the pylorus as observed by this method of examination; to the diagnosis of gastro-duodenal lesions such as carcinoma, ulcers of the stomach and duodenum; and to gall-bladder infection, with or without calculi.

As far as possible this work will be carried on in conjunction with the other clinical departments, all students having the opportunity of studying individual cases clinically before the Roentgenographic study, then comparing the clinical findings, the Roentgen findings, and if possible the surgical findings in such cases as require surgical procedure.

After having had demonstrated to them a series of plates on allied subjects the students are in turn required to re-interpret these Roentgenograms to the class. This method has proved exceedingly valuable and will be followed to a great extent.

Finally, the course will conclude with lectures on Roentgeno-therapy covering the treatment of both superficial and deep-seated lesions, describing the cross-fire method, the advantage of high penetration with the Coolidge tube, and methods of dosage in the application of rays with or without filters. These lectures will be accompanied by a demonstration of cases which have been so treated.

SUMMARY.

	<i>Third Year.</i>	<i>Fourth Year.</i>
Lectures	22 hours	Elective

HYGIENE.

JOHN C. TORREY, Ph.D., *Professor of Hygiene.*

MORTON C. KAHN, A.M., *Instructor in Hygiene.*

Instruction in some of the many branches of hygiene and preventive medicine is given in connection with certain of the courses pursued in the several departments of Bacteriology, Chemistry, Physiology, Pathology and Medicine.

The more distinctive features of this subject, however, are presented in a course of lectures and demonstrations during the third term of the second year. A certain amount of laboratory work is also required of each student. In addition time has been allotted for field work through which the student may acquire experience in making sanitary surveys and visit localities in the vicinity where the practical application of sanitary devices and hygienic methods may be observed.

CORNELL UNIVERSITY MEDICAL COLLEGE

SUMMARY.

	<i>Second Year.</i>
Lectures and Conferences	22 hours
Laboratory Work	44 hours
Field Work	22 hours*

Text-book.—Rosenau, *Preventive Medicine and Hygiene*.

Collateral Reading.—Harrington-Richardson, *Practical Hygiene*; MacNutt, *Manual for Health Officers*; Wood, *Sanitation Practically Applied*; Chapin, *Sources and Modes of Infection*.

MEDICAL JURISPRUDENCE.

OTTO H. SCHULTZE, M.D., *Professor of Medical Jurisprudence*.

A course of lectures from the standpoint of the medico-legal autopsy, with demonstration of material, will be given by Professor Schultze. This course will cover autopsy technique in medico-legal cases, the autopsy protocol, and laboratory methods for establishing the proof of the cause of death in cases of accident, suicide, and homicide; also, the forensic aspect of the subject in cases of indemnity, liability and criminal prosecution.

The clinical aspects of the subject are covered in the regular course of study by several departments and by special lectures. The responsibilities of the physician towards the insane and their relatives and the general public, and the medico-legal aspects of mental deficiency are discussed by Professor Kirby. In the course on Obstetrics Professor Edgar takes up the moral and legal side of rape, feigned and unconscious pregnancy, what constitutes a "live birth," feigned or unconscious delivery, injury to the fœtus during precipitate labor, post-mortem delivery and the diagnosis of recent delivery. The medico-legal aspects of Toxicology are fully covered during the course in Pharmacology by Professor Hatcher.

SUMMARY.

	<i>Third Year.</i>
Lectures	21 hours
(See also Departments of Pharmacology, Obstetrics and Psychiatry.)	

*Eleven afternoons are assigned for field excursions.

FOURTH YEAR ELECTIVES

FOURTH YEAR ELECTIVES.

SESSION OF 1920-1921.

March 28th to May 28th, 1921.

Students will register their courses at the Secretary's office on or before February 1st.

A. ANATOMY.

- I. General Histology. Dr. Chambers, 2 months. Mondays, Wednesdays, Fridays, 9-12. 3-6 students.
- II. Phases of Histogenesis. Dr. Chambers. 2 months. Tuesdays and Thursdays, 10-12. 3-6 students.
- III. Anatomy of the Infant. 2 months. Mondays, Wednesdays, Thursdays, Fridays, 2-5 P. M. 1-4 students.
- IV. Experimental Embryology. Dr. Stockard. 2 months. Tuesdays, 2-3 P.M. Not less than 6 students.
- V. Regional Anatomy. Dr. Morrill. 2 months. Mondays and Wednesdays, 9-12. 3-6 students.
- VI. Neuro-Anatomy. See Neurology.

Py. PHYSIOLOGY.

- I. Calorimeter Investigation. Dr. Lusk. April only. 4 weeks. 9 A.M.-1 P.M. daily. 2 students.
- II. Electrocardiography. Dr. Edwards. 12 weeks. 1-5 P.M. daily. 1-4 students.

C. CHEMISTRY.

- I. Chemical Pathology. Selected work in Blood Analysis. Dr. Benedict. 1 month periods. Tuesdays and Thursdays, 10-1. (Hours assigned are subject to adjustment at students' request). 1-4 students.

Pr. PHARMACOLOGY.

- I. Pharmacology of Cardiac Drugs and Application in Ward Cases. Drs. Hatcher and Eggleston. 2-week periods. Monday, Wednesday, Friday, mornings or afternoons. 4-12 students.

M. MEDICINE.

- I. Clinical Clerks. Drs. Conner, Foster and Stillman. New York Hospital. 1 month periods. Daily, all day. 5 students.
- II. Advanced Course in Metabolism Methods. Given in conjunction with the Department of Chemistry. Drs. DuBois, Benedict, Franke, Barr, McCann and Blau. Bellevue Hospital and Cornell Medical College. The course may be divided into one-month periods (two months' attendance is preferable). Three Undergraduates and three Graduates.

CORNELL UNIVERSITY MEDICAL COLLEGE.

During the first month students will study methods of respiratory physiology and chemistry in the chemical laboratory. Instructions will include the use of the Henderson & Haldane gas analysis apparatus, methods of determining oxygen and CO₂ contents of blood and plasma by means of Van Slyke pipette, and nitrogen and sugar determination in blood and urine. Dr. Benedict will teach the significance and technique of chemical examination of blood and urine.

During the second month students will study cases in the Metabolism Ward, learn management of diets, technique of the Tissot apparatus and respiratory calorimeter, and the clinical application of the various methods and tests.

- III. Ambulatory Medicine. Dr. Sheldon. 1 month period. Monday, Wednesday, Friday, 10 A.M.-1 P.M. 5 students.
- IV. Fluoroscopy of the Gastro-Intestinal Tract. Dr. Holland. New York Hospital. 1 month periods. Tuesday and Friday, 4-6 P.M. 6 students.
- V. Electro-Cardiography and Polygraphy. Interpretation of the electro-cardiogram and the use of the polygraph and the interpretation of its records. Dr. Pardee. New York Hospital. 1 month periods. Monday and Friday, 3-5 P.M. 5 students.
- VI. Physical Diagnosis of Diseases of Lungs. Dr. Jenison. Bellevue Hospital, Tuberculosis Wards. 1 month. Tuesday and Thursday, 2-4. 6 students.

CP. CLINICAL PATHOLOGY.

- I. Clinical Bacteriology and Vaccine Therapy. Daily, 9-1, April and May. Number of hours, optional. Must take at least 25 actual hours. Dr. Thro. 10 students.
- II. Complement Fixation. Every Wednesday afternoon, 2:30 to 5:30. April and May. 1 to 5 students. Dr. Schwartz.
- III. Advanced Clinical Pathology of Urine and Blood. Daily, 9-1. April and May. Number of hours, optional. Must take at least 50 hours. Drs. Thro and Richards. 10 students.

S. SURGERY.

- I. Course in Fractures. Mondays, Wednesdays and Fridays, during April. 2-5 P.M.

Lecturers:—

- Dr. Joseph A. Blake. (7 lectures.) Treatment of Fractures by Suspension. Two lectures on general theory and practice. Five lectures on regional application of treatment of humerus, forearm, femur and leg.
- Dr. James M. Hitzrot. (5 lectures.) Principles and Theory. One lecture on operative treatment.
- Dr. H. H. M. Lyle. (1 lecture.) Compound Fractures.
- Dr. Alexis Carrel. (1 lecture.) Carrel Treatment.
- Dr. B. J. Lee. (1 lecture.) Joint Infections.
- Dr. George W. Hawley. (6 lectures.) Mechanical Treatment. One lecture on joint fractures.
- Dr. John A. C. Gerster. (2 lectures.) Late and Bad Results.
- Dr. M. K. Smith and Dr. Kenneth Johnson, recitations.

FOURTH YEAR ELECTIVES

PROGRAMME OF ELECTIVE COURSE IN FRACTURES

	2	3	4
Monday	Blake	Hawley	Recitation
Wednesday	Hitzrot	Dislocations	Recitation
Friday	Blake	Hawley	Recitation
Monday	Blake	Hawley	Recitation
Wednesday	Hitzrot	Lee	Recitation
Friday	Blake	Hawley	Recitation
Monday	Blake	Hawley	Recitation
Wednesday	Hitzrot	Carrel	Recitation
Friday	Blake	Hawley	Recitation
Monday	Blake	Gerster	Recitation
Wednesday	Hitzrot	Lyle	Recitation
Friday	Hitzrot	Gerster	Recitation

Extra half-week—Demonstrations, Bellevue.

- II. Clinical Clerks. Dr. Hartwell. Bellevue Hospital. 1 month periods. All day. 4 selected students.
- III. Surgical Pathology. Bellevue Hospital. Laboratory and wards. 1 month periods. All day. 2 students.
- IV. Clinical Clerks. Dr. Gibson. New York Hospital. 1 month periods. All day. 4 students.

Ob. OBSTETRICS.

- 1. Clinical Clerkship in Obstetrics. Drs. Edgar, Bailey and Williamson. Bellevue Hospital. 1 month only. Full time. 9 A.M.-5 P.M. 2 students.

Pt. PATHOLOGY.

- I. Tumor Diagnosis. Dr. Ewing. 2 months, 5 days. 1-5 P.M. daily, except Saturdays. 5 students.
- II. Pathological Thesis. Dr. Ewing. 2 months. All day, except Saturday. Saturdays, 9 A.M.-12 M. 5 students.
- III. Gynæcological Pathology. Dr. L'Esperance. 2 months. Afternoons except Saturdays. Time to be arranged with instructor.
- IV. Neuropathology. Dr. ———. 2 months. Daily except Saturday 1 to 5 P.M. 2 students. 2 months.

B. BACTERIOLOGY.

- I. Experimental Laboratory Course in General and Applied Immunology. By Dr. A. F. Coca, at the New York Hospital.
 - (1) Experimental analysis of natural immunity to diphtheria.
 - (A) Schick test (in human beings).
 - (B) Cellular immunity (in the rat).
 - (1a) Active immunization to diphtheria (in human beings).
 - (2) Method of testing antitoxic sera.
 - (3) Grouping of human individuals with respect to iso-hemagglutinins.

CORNELL UNIVERSITY MEDICAL COLLEGE.

- (4) Practical test of the blood, as performed previous to the operation of blood transfusion.
- (5) The characteristics of immunity reactions.
- (6) Practical study of bacterial agglutinins, precipitins, hemolysins and complement.
- (7) Forensic test for human blood.
- (8) Specific complement fixation (Bordet-Gengou).
- (9) Wassermann reaction.
- (10) Cobra venom.
- (11) Anaphylaxis.
- (12) Human hypersensitiveness (hay-fever, asthma, food idiosyncrasies). By Dr. Robert A. Cooke, at the New York Hospital.
 - (A) Practical diagnosis.
 - (B) Specific treatment.

Note—Each exercise is accompanied with a full discussion of all of the principles and theories concerned in the experiments.

The course is given from 9 to 12 A.M. during a period of four weeks, in April, as follows: Monday, Wednesday and Friday of the first week, and Monday to Friday, inclusive, in each of the other three weeks.

In the interest of the students the course is given to small classes (not exceeding 16 members) and in the event that 24 or more students apply the course will be repeated in May during corresponding time periods.

Since definite assignments cannot be made until the number of applicants is known students desiring to take this course are requested to apply to the Secretary's Office not later than February first. This will enable the department to consider preferences and make assignments which will not interfere with other electives the student may desire to take.

N. NEUROLOGY.

COURSES IN NEURO-PSYCHIATRY AND NEURO-ANATOMY. ONE-MONTH PERIODS.

- I. Neurology: daily clinics at Cornell Dispensary from 2 to 4 P.M. Also one and two hour periods, 3 (or 4) P.M. to 5 P.M. every afternoon in the Neurological Department, Bellevue Hospital.
 - II. Neurology: Bellevue Hospital, three days weekly, 11 A.M. to 12 M. Psychiatry, 10 A.M. to 12 M., Cornell Dispensary; Ward Work in Psychiatry, three forenoons, at Ward's Island; Dr. Kirby.
 - III. Neurological Clinic. Neurological Institute. One day, 2-5 P.M. Dr. Stevenson.
 - IV. Three days Neuro-Anatomy, 9-11 A.M. Dr. Stockard. This will be held for one week out of the four. Students will be provided with a specimen brain for dissection.
- Students who desire more Neurology and less Psychiatry, can make arrangements with the teachers, and the same may be done for those who desire to emphasize Psychiatry.
- A Student can take such parts of this course as he chooses, except that it is imperative that he takes at least the daily afternoon course at the College Clinic.

FOURTH YEAR ELECTIVES

Ps. PSYCHIATRY.

- I. Psychiatry. Drs. Kirby and Cheney. Psychiatric Institute. Ward's Island. 3 forenoons a week for 1 month. (See Neurology.)
- II. Psychiatry. Drs. Cheney and McCurdy. College Dispensary. 1 month periods. 3 forenoons each week.

Pd. PEDIATRICS.

- I. Clinical Pediatrics. Drs. Schloss, Schroeder, Sammis and Lang. New York Nursery and Child's Hospital daily 9 A.M. to 5 P.M. for periods of 1 month. Limited to 3 or 4 students.
- II. Clinical Pediatrics. Dr. Roper. New York Hospital for period of 1 month. Limited to 2 students.

G. GYNÆCOLOGY.

- I. Clinical Gynæcology. Dr. Ward. Woman's Hospital. 1 month periods. Daily, as scheduled below. Work conducted in Wards, Operating Room, Laboratory and O. P. D. 4 selected students.

A. FIRST TWO WEEKS.

Monday.

9-12. Operative Clinic.
12- 1. Study.

2-4. Operative Clinic.
4-5. Pathological Lab.

Tuesday.

9-11. Pathological Lab.,
11-12:20. Cystos. Clinic.

2-5. Operative Clinic.

Wednesday.

9-10. O. P. D.
10-11. Follow-up.
11- 1. Study.

2-4. O. P. D.
4-5. Pathological Lab.

Thursday.

9-11. Pathological Lab.,
11-12:30. Cystos. Clinic,

2-4. Operative Clinic.
4-5. Pathological Lab.
5 Conference, Surgical Staff.

Friday.

9-11. Operative Clinic.
11-12. Conference.
12- 1. Study.

2-5. Operative Clinic.

Saturday.

9-11. O. P. D.
11- 1. Study.

2-3. O. P. D.

B. SECOND TWO WEEKS.

Monday.

9-1. Wards.

2-4. Operative Clinic.
4-5. Pathological Lab.

Tuesday.

9-1. Wards.

2-5. Operative Clinic.

Wednesday.

9-1. Wards.

2-4. O. P. D.
4-5. Pathological Lab.

CORNELL UNIVERSITY MEDICAL COLLEGE.

Thursday.

9-1. Wards.

2-4. Operative Clinic.

4-5. Pathological Lab.

5 Conference, Surgical Staff.

Friday.

9-10. Wards.

10-11. Conference.

11- 1. Study.

2-5. Operative Clinic.

Saturday.

9-1. Wards.

2-3. O. P. D.

D. DERMATOLOGY.

- I. Clinical Dermatology and Salvarsan Administration. Drs. Schwartz, Gilmour and Levin. 1 month periods. Tuesdays and Thursday, 2 P.M. 6 students.

L. LARYNGOLOGY.

- I. Clinical Courses in Laryngology and Rhinology. Drs. Montgomery and Howard. 1 month periods. Mondays, Wednesdays, Fridays, 2-3 P.M. College Dispensary. 4 students.

Op. OPHTHALMOLOGY.

- I. Operative Ophthalmology. Dr. Reese. N. Y. Eye and Ear Infirmary. 1 month periods. Mondays, 2-6 P.M. 20 students.
- II. Ophthalmoscopy. Dr. Reese. N. Y. Eye and Ear Infirmary. Wednesdays and Fridays, 2-4 P.M. 1 month periods. 6 students.
- III. Ophthalmoscopy and Refraction. Dr. Samuels. N. Y. Eye and Ear Infirmary. 1 month periods. Mondays and Wednesdays, 2-4 P.M. 6 students.
- IV. Ophthalmoscopy and Refraction. Dr. Vandegrift. Cornell Dispensary. 1 month periods. Mondays, Wednesdays, and Fridays, 2-4 P.M. 6 students.
- V. Operative Ophthalmology. Dr. Samuels. N. Y. Eye and Ear Infirmary. 1 month periods. Fridays, 2-4 P.M. 20 students.
- VI. Ophthalmoscopy and Refraction. Dr. Drake. Cornell Dispensary. 1 month periods. Tuesday, Thursday and Saturday. 2-4 P.M.
- VII. Ophthalmoscopy. Dr. Kelly. St. Vincent's Hospital. 1 month periods. Tuesday, 2-4 P.M. 6 students.
- VIII. Operative Ophthalmology. Dr. Kelly. N. Y. Eye and Ear Infirmary. 1 month periods. Mondays, 2-6 P.M. 20 students.

Ot. OTOTOLOGY.

- I. Otology. Dr. Whiting. N. Y. Eye and Ear Infirmary. 1 month periods. Mondays, Wednesdays and Fridays, 2-3 P.M. 5 students.
- II. Otology. Dr. McAuliffe. 1 month periods. Tuesdays, Thursdays and Saturdays, 2-3 P.M. 3 students.

FOURTH YEAR ELECTIVES

Or. ORTHOPÆDICS.

- I. The Orthopedic Department of the Hospital for Ruptured and Crippled on Tuesdays, Thursdays and Saturdays, from 1-3, by Doctors Wallace, Cilley and Stephens. 10-12 students.
- II. The Hospital for Industrial Surgery, on Mondays, Wednesdays and Fridays, from 2-4, by Drs. Wallace and Healey. Specializing in post-operative treatment of industrial injuries. 10-12 students.

H. HYGIENE.

- I. Laboratory Methods and Procedures. Dr. Torrey. Loomis Laboratory. Daily, 1 to 5 P.M., for 2 months. 2 students.

U. UROLOGY.

- I. Minor Urology. Drs. Valentine and Rohde. Cornell Dispensary. April only. Daily, 2 to 4 P.M. 6 students.
- II. Major Urology. Drs. Keyes, Barringer and Jeck. Bellevue Hospital, Ward K4, 2 to 5 P.M., daily. Diagnosis and Treatment of Surgical Urological conditions. 1 month.
- III. Minor Urology and Elementary Cystoscopy. Drs. Valentine and Rohde as in Course I. For students who have completed Courses I or II. May only. 4 students.

NOTE—In addition to the above, students will often be able to arrange individual work on application to the heads of Departments.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice.

SCHEDULE OF COURSES*

FIRST YEAR—SESSION OF 1920-1921—FIRST TERM

September 28th to December 18th.

September 1911 to December 1911.						
Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	A N A T O M Y					
10						
11						
1	Histology and Embryology	Chem. L.	Histology and Embryology	Chem. L.	Histology and Embryology	
2		Morphology				
3						
4				Chem. Lab.		
5						
Additional ELECTIVE courses may be offered in Department of Anatomy Saturday P. M.						

FIRST YEAR—SESSION OF 1920-1921—SECOND TERM

January 3rd to March 12th.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	Histology and Embryology			Chem. Rec.	Histology and Embryology	Histological Technique and Diagnosis
10				Anatomy		
11						
1	Anatomy	Chem. L.	Anatomy	Chem. L.	Anatomy	
2						
3		Chem. Lab.				
4						
4:30						

Additional ELECTIVE courses may be offered in Department of Anatomy or Chemistry, 4-6 P. M. and Thursday and Saturday 1-6 P. M.

FIRST YEAR—SESSION 1920-1921—THIRD TERM

March 14th to May 28th.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		
9	Chem. L.	Physiol. L.	Chem. L.	Physiol. L.	Chem. L.	Physiol. L.		
10	Chem. Lab.	Physiol. Lab.	Chem. Lab.	Physiol. Lab.	Chem. Lab.	Physiol. Lab.		
11								
12								
2	Neuro- Histology	Physiol. Rec.	Neuro- Histology	Physiol. Rec.	Neuro- Histology			
3				Chem. Rec.				
4								

*Abbreviations.—L., lectures; Lab., laboratory; Rec., recitations; Sec., section (the class being assigned to two or more divisions for certain exercises); B. H., Bellevue Hospital (Second Division); B. H. 4, Bellevue Hospital (Fourth Division); C. D., College Dispensary; Man. Mat., Manhattan Maternity Hospital; N. C., New York Nursery and Child's Hospital; N. Y., New York Hospital; O. P. D., Bellevue Hospital, Out Patient Department; R. & C., Hospital for the Ruptured and Crippled; St. L., St. Luke's Hospital; W. I., Ward's Island, Manhattan State Hospital; Wom. Hosp., Woman's Hospital.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice.

SECOND YEAR—SESSION OF 1920-1921—FIRST TERM

September 28th to December 18th.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	PHYSIOLOGY LECTURE					
10	Physiol.* Lab.	Anatomy	Physiol.* Lab.	Anatomy	Physiol.* Lab.	Anatomy
11						
12						
2	Physiol. R.	Physiol. Elective	Physiol. R.	Physiol. R.	Physiol. Seminary	
3	Elective†‡	Pharm- acology	Elective†	Pharm- acology	Elec- tive†	Pharm- acology
4						

*Ithaca students elect either Anatomy or Physiology until course in Nutrition begins.
†The Student will elect Anatomy, Physiology or Chemistry.
‡Lectures on Physiology of Reproduction, 3 to 4 P.M.

NOTE.—Vertical divisions in daily columns indicate that such courses run a half term only. Courses change Nov. 8th, 9 A. M.

SECOND YEAR—SESSION OF 1920-1921—SECOND TERM

January 3rd to March 12th.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	Med. R. Sec. A Sur.R.Sec.B.	Med. R. Sec. B Surg.R.Sec.A.	Pathology	Surg. L.	Pathology	Surg. Clinic
10	Pathology	Pharmacology		Pharmacology			Medicine Clinic
11			Patholog. Anatomy		Patholog. Anat.	
12						
	B A C T E R I O L O G Y					Pharmacology L.
3						
4						

SECOND YEAR—SESSION OF 1920-1921—THIRD TERM

March 14th to May 28th.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	Surg. L.	<i>Sections</i> See Schedule No. 1, Page 70	Surg. L.	<i>Sections</i> See Schedule No. 1, Page 70	Pathology	<i>Sections</i> See Schedule No. 1, Page 72
10	Pathology		Hygiene			
11						
12						
1						Hygiene Field Excursion
2	<i>Sections</i> See Schedule No. 1, Page 72	Immunology L.		Immunology L.	<i>Sections</i> See Schedule No. 1, Page 72	
3	Med. Clinic, B. H.	Phamacol. L.	Med. R. Sec. A.	Gynæcology L.	Pharmacol. L.	
4			Med. R. Sec. B.		Neurology Clinic	
5	Obstetric R.	Obstetrics Clinic and Conference	Gynæcology L.			

For schedule of sections see pages 76 and 77.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice. For abbreviations see page 70.

THIRD YEAR—SESSION OF 1920-1921—FIRST TERM

September 28th to December 18th

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	Pathology			Patholog. Anatomy	Pathology	Med. L. Prof. Conner
10						Surgery Clinic C. D.
11	Medicine Clinic C. D. Prof. Conner	Clinical Pathology				
12						
2	Sections (See Schedule No. 2)		Urology L. Prof. Keyes	Laryngology Prof. Smith	Sections (See Schedule No. 2)	Sections (See Schedule No. 3)
3	Sections (See Schedule No. 3)	Surgery Clinic Prof. Hartwell	Orthoped. L. Prof. Wallace	Sections (See Schedule No. 8)	Neurology Clinic Prof. Dana	
4	Sections (See Schedule No. 3)			Otology* Prof. Whiting	Sections (See Schedule No. 3)	
5	Therap. L. Prof. Goodridge					

*First eight weeks only.

THIRD YEAR—SESSION OF 1920-1921—SECOND TERM

January 3d to March 12th

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	Sections	Surgery Prof. Taylor	Sections	Surg. Clinic N. Y. Prof. Gibson	Sections	Urology Clinic B. H. Prof. Keyes
10		Surgery Clinic C. D.				
11						
12	S E C T I O N S (See Schedule No. 4)					

2	Sections (See Schedule No. 2)		Med. Psychology L.	Dermatology Clinic Dr. Schwartz	Sections (See Schedule No. 2)	Pediatrics Clinic, N. C. Prof. Schloss
3	Applied Anatomy	Neurology Clinic Prof. Dana	Applied Anatomy	Surg. Clinic B. H. Prof. Hartwell	Applied Anatomy	
4		Obstetrics Clinic Prof. Edgar		Obstetrics L. Prof. Edgar		
5	Med. Jurisprud. L. Prof. Schultze	Med. L. Prof. Conner	Therap. L. Prof. Goodridge	Therap. Rec.		

For schedule of sections see pages 76 and 77.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice. For abbreviations see page 70.

THIRD YEAR—SESSION OF 1920-1921—THIRD TERM

March 14th to May 28th.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	Sections	Surg. L. Prof. Gibson	Sections	Surg. L. Prof. Gibson	Sections	Med. Clinic B. H.
10		Psychiatry L.		Med. Clinic Prof. Conner C.D.		
11	S E C T I O N S (See Schedule No. 4)					
12						

2	Roentgenology L. Prof. Cole	Ophthal. Clinic or L. Prof. Reese	Psychiatry W. I.	Operative Surgery	Roentgenology L. Prof. Cole	Pediatrics Clinic Prof. Schloss
3	Operative Surgery	Neurology Clinic Prof. Dana			Surg. Clinic† Prof. Lyle St. L.	
4		Surg. L.				
5	Med. Jurisprud. Prof. Schultze	Therap. Rec.		Therap. L. Prof. Goodridge		

†Elective for fourth year students.

For schedule of sections see pages 76 and 77.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice. For abbreviations see page 70.

FOURTH YEAR—SESSION OF 1920-1921

September 28th, 1920 to March 26th, 1921.

	Medicine		Surgery		Neurology B. H. Tu. Th. S. 2-5 P. M.	Pediatrics N. C.—M. F. N. Y.—W. 2-5 P. M.	Orthopedics R. & C. M. W. F. 9 A. M.-12 N.	Gynaecology Woman's Hosp. M. W. F. 2-5 P. M.	Gynaecology Wom. Hosp. Tu. Th. S. 9 A. M.-5 P. M. M. W. F. 9 A. M.-1 P. M. First 2 weeks only*	Urology Tu. Th. S. 9 A. M.-5 P. M. M. W. F. 9 A. M.-1 P. M. First 2 weeks only*	Elective† Tu. Th. S. 9 A. M.-1 P. M.
	N. Y.	B. H.	N. Y.	B. H.							
September 28 to October 23	A	F	F	D	B	B	B	C	C*	C*	B
October 25 to November 20	B	A	F	E	C	C	C	D	D*	D*	C
November 22 to December 18	C	B	A	F	D	D	D	E	E*	E*	D
January 3 to 29	D	C	B	A	E	E	E	F	F*	F*	E
January 31 to February 6	E	D	C	B	F	F	F	A	A*	A*	F
February 28 to March 26	F	E	D	C	A	A	A	B	B*	B*	A

*Each Section in Urology takes first two weeks of the period, Gynaecology the second two weeks. Women take Gynaecology the entire four weeks.

†Students desiring electives will first consult the head of department and will then register at the Secretary's office four weeks in advance for Elective work on Tuesday, Thursday and Saturday A.M.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice. For abbreviations see page 70.

March 28th to May 28th, 1921.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9						
10						
11						
12						
1						
2						
3						
4						
5						

ELECTIVES

Students will register their courses at the College office on or before Feb. 1st

Announcement of courses on page 63.

(No course can be dropped without written permission from heads of all departments concerned, and the Dean.)

Students will take work in Pathological Anatomy (Autopsies) as posted on Bulletin Board.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice.

DETAIL SCHEDULE

OF SECOND, THIRD AND FOURTH YEAR

SECTION CLASSES

NOTE—Section periods in each instance include both dates. Sections are designated by letters; a figure following indicates a half section.

SECOND YEAR SECTIONS—Schedule No. 1

Subjects	Mar. 14th— April 2d	April 4th— 21st	April 22d— May 10th	May 11th— 28th
Surgery, B.H. Tu., Th., S. 9—10.30 A.M.	A ₁	A ₂	B ₁	B ₂
Surgery, C.D. M., F., 1.30—3 P.M.	A ₂	B ₁	B ₂	A ₁
Medicine, B.H., 4th Div. Tu., Th., S., 9—11 A.M.	B ₁	B ₂	A ₁	A ₂
Physical Diagnosis, C.D. Tu., Th., S., 9—11 A.M.	B ₂	A ₁	A ₂	B ₁

THIRD YEAR SECTIONS—Schedule No. 2

Subjects	Sept. 28th— Oct. 23d		Oct. 25th— Nov. 20th		Nov. 22d— Dec. 18th		Jan. 3d— 25th		Jan. 26th— Feb. 17		Feb. 18th— March 12th	
Ophthalmology M., Tu., F. 2—3 P.M. C.D.	A		F		E		D		C		B	
Otology M., Tu., F. 2—3 P.M. C.D.	B		A		F		E		D		C	
Laryngology M., Tu., F. 2—3 P.M. C.D.	C		B		A		F		E		D	
Dermatology M., Tu., F. 2—3 P.M. C.D.	D		C		B		A		F		E	
Neurology M. 2—3 P.M. C.D.	E		D		C		B		A		F	
Gynæcology* C.D. Tu., F. 2—3 P.M.	E ₁	E ₂	D ₁	D ₂	C ₁	C ₂	B ₁	B ₂	A ₁	A ₂	F ₁	F ₂
Gynæcology* B.H., O.P.D. Tu., F. 2—3 P.M.	E ₂	E ₁	D ₂	D ₁	C ₂	C ₁	B ₂	B ₁	A ₂	A ₁	F ₂	F ₁
Urology M., Tu., F. 2—3 P.M. C.D.	F		E		D		C		B		A	

*Half section 1 will report to C. D., half section 2 to O. P. D. for first half period, and the reverse for second half period. Half sections change on Oct. 10, Nov. 7, Dec. 5, January 14, Feb. 5 and March 2, at 9 A.M.

THIRD YEAR SECTIONS—Schedule No. 3

Subjects	Sept. 28th— Oct. 9th	Oct. 11th— 23d	Oct. 25th— Nov. 6th	Nov. 8th— 20th	Nov. 22d— Dec. 4th	Dec. 6th— 18th
Orthopedics M., Th., 3—4 P.M. &C., S., 2—3 P.M. C.D., M., Th., —5 P.M. (Rec.)	A	F	E	D	C	B
Therapeutics B. H. ., Th., 3—5 P.M.	B F	A E	D F	C E	B D	A C
Obstetrics, B.H.* ., Th., 3—5 P.M. S., 2—4 P.M.	C D	C D	A B	A B	E F	F F
Obstetrics, B.H.* W., F., 4—6 P.M.	C D	C D	A B	A B	E F	E F
Gynæcology , C.D., 2—3 P.M.	E ₁	B ₁	C ₁	F ₁	A ₁	D ₁
Gynæcology B.H., O.P.D., M., 3—4 P.M.	E ₂	B ₂	C ₂	F ₂	A ₂	D ₂
phthalmology, C.D. W., F., 4—5 P.M.	A B	A B	E F	E F	C D	C D
Pediatrics Rec. ., F., 4—5 P.M.	E F	E F	C D	C D	A B	A B
*On notice by the Department the section may be held elsewhere. Students will watch the bulletin board.						

THIRD YEAR SECTIONS—Schedule No. 4

Subjects	Jan. 3d— 25th	Jan. 26th— Feb. 17th	Feb. 18th— Mar. 12th	Mar. 14th— April 9th	Apr. 11th— May 4th	May 5th— 28th
Medicine Rec. Tu., Th., S. 11 A.M.—12 N.	A B E	A B E	A B E	C D F	C D F	C D F
Medicine Rec. M., W., F. 11 A.M.—12 N.	C D F	C D F	C D F	A B E	A B E	A B E
Surgery Rec. Tu., Th., S. 12 N.—1 P.M.	A B E	A B E	A B E	C D F	C D F	C D F
Surgery Rec. M., W., F. 12 M.—1 P.M.	C D F	C D F	C D F	A B E	A B E	A B E
Surgery St. L. M., W., F. 9 A.M.—1 P.M.	A	B	E	C	F	D
iatrics, Willard-Parker Tu., Th. 11:30 A.M.—1 P.M.	F	D	C	B	E	A
Pediatrics, Rec. M., F. 10—11 A.M.	D F	D F	A B	A B	C E	C E
Pediatrics Section. C. Hosp., M., W., F. 9—10:30 A.M.	C	A	D	E	B	F
Surgery B.H. Tu., Th., S. 11 A.M.—1 P.M.	D	C	F	A	B	E
Medicine C. D. M., W., F. 11 A.M.—1 P.M.	B	E	A	D	C	F
ecology, Wom. Hosp. O.P.D., M., W., F. 9—10:30 A.M.*	E ₁ E ₂	C ₁ C ₂	F ₁ F ₂	D ₁ D ₂	A ₁ A ₂	B ₁ B ₂

*Sections change in middle of period. Each half sections reports five times.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice. For abbreviations see page 70.

EXAMINATIONS AND ADVANCEMENT IN COURSE.

I. Advancement.—Students are advanced in course from one year to the next upon recommendation by heads of departments after examination in the work of that year, but examinations in major or minor subjects may, at the discretion of the Head of the Department, include all the work previously covered in the year or years preceding the examinations in question. There is, however, no unnecessary repetition of subjects taught from year to year.

II. Examinations.—Examinations for advancement in course, graduation and admission to advanced standing are held at the close of the year, except that in each course extending through a part of the year only, the examination may be held at the close of the course.

A grade of 75 per cent. is required to pass; a student failing to pass is either conditioned or dropped (see subjects of examinations, etc., pages 78-80).

A conditioned student may be re-examined in September.

A student who fails to pass all of his conditions in September shall not be allowed to register in the succeeding year of the curriculum, but shall be required to repeat the year.

A dropped student shall not be re-examined nor shall he be re-admitted to this College.

III. Record of Grades.—At the completion of a final examination at the end of a course the grades of each student are to be promptly compiled and submitted by the examiner to the College office for record by the Secretary, and grades once recorded are not subject to change except in accordance with the rules governing re-examination (See II.).

IV. Final Examinations.—Annual examinations are held at the end of a course, or coincident group of courses, in the hours allotted to said courses, or during the last week of the session, at the discretion of the head of the department, who will give notice of the date of examination through the office of the Secretary. All such final examinations are conducted under the direction of the head of the Department.

V. Major and Minor Courses.—Major courses are those fundamental courses in which a student completes his work in a given department or subject. Minor courses comprise the shorter laboratory and recitation courses.

Subjects of Examination for Completion of the First Year.

Major Subjects—*Anatomy.

Physiology.

*Organic Chemistry (including laboratory work).

*Histology and Embryology.

EXAMINATIONS AND ADVANCEMENT IN COURSE.

Minor Subjects—*Neuro-Anatomy.

Physiological Chemistry.

Conditions allowed: 1 Major and 1 Minor; or 2 Minor subjects.

NOTE—All conditions must be successfully passed before entrance into the next succeeding year will be allowed.

Subjects of Examination for Completion of the Second Year.

Major Subjects—*Physiology.

Pharmacology and Materia Medica.

Pathology.

*Bacteriology.

Minor Subjects—Medicine.

Surgery.

Obstetrics.

*Anatomy.

*Nutrition.

Hygiene.

Conditions allowed: 1 Major and 1 Minor; or 2 Minor subjects.

(See note above.)

Subjects of Examinations for Completion of the Third Year.

Major Subjects—*Pathology.

*Obstetrics.

Minor Subjects—Medicine.

Surgery.

Therapeutics.

*Clinical Pathology.

Pediatrics.

Neurology.

*Applied Anatomy.

*Pathological Anatomy.

*Urology.

*Otology.

Ophthalmology.

*Laryngology and Rhinology.

*Dermatology.

Psychiatry.

Conditions allowed: 1 Major and 1 Minor; or 2 Minors.

Subjects of Examination for Completion of the Fourth Year and Graduation.

Major Subjects—Medicine.

Surgery.

Therapeutics.

Pediatrics.

(See note above.)

*In the subjects thus marked the examination is given at the end of the course, under the direction of the head of the department. In other subjects the final examination is at the end of the year.

CORNELL UNIVERSITY MEDICAL COLLEGE.

Minor Subjects—Neurology.

Orthopædic Surgery.

Gynæcology.

Conditions allowed:—

If any student fails to pass in not more than one major, or in two minor subjects, a re-examination in those subjects may be allowed, and if the candidate is then successful the degree may be conferred.

If the candidate fails to pass in any subject at this second examination, the work of the fourth year must be repeated.

The examination in the major subjects are allowed two hours, and in the minor subjects one hour each.

REQUIREMENTS FOR GRADUATION.

1. Candidates for the degree of doctor of medicine must have studied medicine for four full years in an accredited medical college, and the fourth year at least must have been spent in the Cornell University Medical College.

2. Candidates must present satisfactory evidence of good moral character and of being not less than twenty-one years of age.

3. Candidates must file with the Secretary of the Faculty satisfactory evidence of having compiled with the entrance requirements (see page 23), together with the requisite legal medical student certificate.

NOTE—This certificate is issued by the Department of Education of the State of New York on presentation of a diploma from a recognized College or University or properly attested certificate showing that such a diploma has been granted, together with a fee of twenty-five cents. If the student so requests, the Secretary of the Faculty may forward such diploma or certificate to the Department of Education of the State of New York with a request for the legal student certificate.

4. Candidates must have dissected at least one lateral half of the cadaver. They must, further, have taken the regular course of two weeks in practical obstetrics, and a certificate* covering this course must be filed at the Secretary's office before registration for the final examinations, which begin about the last week of May.

5. In addition to the yearly examinations above specified for advancement in course, candidates must pass during the fourth year examinations in medicine, surgery, therapeutics, gynæcology, and the minor subjects which are specified on this page (see above).

6. Candidates rejected at the final examination will not be re-examined until after having repeated the fourth year of study.

Before being readmitted to the fourth year the candidate may be required to pass a satisfactory examination in anatomy, physiology, chemistry, and materia medica, the major subjects of the preceding years.

7. The degree will not be conferred upon any candidate who absents himself from the public Commencement without the special permission of the Faculty.

*This certificate must set forth the number of obstetrical cases personally attended by the student.

EXAMINATIONS AND ADVANCEMENT IN COURSE.

8. The Faculty reserves the right to terminate the connection of any student with the institution *at any time* on the ground of what they may deem moral or mental unfitness for the profession, or improper conduct while connected with the College.

DIPLOMAS OF LICENTIATE OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND MEMBERSHIP OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Graduates of the Cornell University Medical College are admitted to the final examinations for diploma of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England, upon presenting proper certificates that certain conditions applicable to the foreign universities and colleges, which are recognized by the examining board, have been complied with.

Further information may be obtained from the Secretary of the Board (Mr. F. G. Hallet) at the Examination Hall, Queen's Square, Bloomsbury, London, W. C.

Prizes.

I. For general efficiency.

In commemoration of John Metcalfe Polk, an Instructor in this College, who was graduated from the Medical Department of Cornell University on June 7, 1899, and died on March 29, 1904, an annual prize of \$500 will be presented at each Commencement to the members of the Graduating Class who have pursued the full course of study in Cornell University Medical College.

This prize will be awarded as follows:

To the student having the highest standing.....	\$300
To the student having the second highest standing.....	125
To the student having the third highest standing.....	75

II. For efficiency in Gynæcology.

In memory of William M. Polk, M.D., LL.D., Dean and Professor of Gynæcology in Cornell University Medical College from its establishment in 1898 until his death June 23, 1918, an annual prize, established by Mrs. Polk, of \$200, to the two members of the Senior Class in order of merit, for obtaining especial distinction in the Department of Gynæcology.

This prize will be awarded as follows:

To the student attaining the highest distinction.....	\$125
To the student attaining the next highest distinction.....	75

III. For efficiency in Otology.

Two prizes, the first of \$50, the second of \$25, are offered by Professor Whiting to the two students of the graduating class to be designated by him who make the best records in the practical and theoretical work in Otology.

Hospital Appointments.—Members of the graduating class of Cornell University Medical College are nominated for appointment to the staff of internes in the Cornell division of Bellevue and the New York and Memorial Hospitals in accordance with the following general plan:

1. The list of available positions having been posted, members of the

CORNELL UNIVERSITY MEDICAL COLLEGE.

graduating class make application for such services as they desire, naming not less than two choices, and agreeing to accept the position if offered.

2. A committee of the faculty determine the appointments from the list of candidates, basing their determination upon—

- a. The student's standing during his first three years in Medical College:
- b. The quality of his work in the hospital ward:
- c. Personality and general fitness for the position desired.

The nominations thus made are subject to confirmation by the faculty of the Medical College and by the hospital. The faculty expressly reserve the right to alter the method of appointment in any or all particulars, at any time, and without notice.

The students and graduates of the Cornell University Medical College are also expected to compete for positions on the resident staff of the other hospitals of the city.

Some of these hospitals are: The City, Harlem, Gouverneur, Roosevelt, Fordham, St. Luke's, St. Vincent's, St. Francis', Mount Sinai, Lenox Hill, Lebanon, Lincoln, New York Eye and Ear Infirmary, and the many hospitals in Brooklyn, Jersey City, Newark, Paterson, etc.

The requirements, the times of examination, and the period of service differ. The details can be learned by application, written or in person, to the superintendents or to the secretaries of the medical boards of the various hospitals.

A record of the hospital appointments received by the classes of 1917 and 1918 are shown in the list of Graduates at the end of the Announcement.

The **Alpha Omega Alpha**, an honorary medical society, has maintained a chapter in this College since 1910. The members are elected by the membership of the society on nomination from the College Office. Nominations include only those who have for three years made a scholarship average of not less than 85 per cent. Popularity and fitness for medical work are considered by the members in selecting from this list. Not more than one-sixth of each class is eligible for election. The present membership is as follows:

CLASS OF 1920.

Harold Stewart Belcher
Richmond Douglass
Cora Hennen Morris
Mary Reesor
Paul Reznikoff
Edwin Philip Russell
John Edward Sutton, Jr.
Sam Zachary Levine

CLASS OF 1921.

Hyla Stowell Watters
Henry Bruner Sutton
Leighton Payson Rand
William Malcolm Stobbs
David Warshaw
Paul Truitt Willis

COURSES FOR GRADUATES.

For some years special courses have been offered in several of the departments, and they have been, from time to time, pursued by graduates in medicine, teachers and advanced students and research workers in the medical sciences. For the benefit of such applicants these courses have been compiled, and are listed below under the several departments by which they are offered. For a list of the teaching staff the reader is referred to the detailed statement of the several departments contained in pages 31 to 62 of this announcement.

The courses offered below with the exceptions indicated are minor courses continuing six to eight weeks. Several departments are equipped to offer co-ordinated work extending over longer periods, and such courses can be arranged for the student by consultation with the head of the department.

In general it is recommended that students applying for admission to graduate courses so far as possible arrange to take consecutive work for a period of at least one College session. Such courses will be under the immediate supervision of an instructor from the department in which the greater portion of the student's work is performed.

The faculty reserve the right to limit the number of applicants received and to alter or withdraw courses at any time without notice.

ADMISSION.

Graduates in Medicine, Arts or Science, from approved colleges, who desire to pursue courses not leading to a degree, are admitted to registration as graduate students, after approval by the head of the department. Such courses do not count in any way as a part of the four years' course required of candidates for the degree of doctor in medicine. All students or other workers pursuing courses indicated below are required to register at the office of the Secretary.

FEES.

Graduate students are admitted to any of the courses of instruction offered on the payment of a registration fee of ten dollars and the tuition fee assigned to the course (see below). Those who have been previously registered as students in the Cornell University Medical College are not required to pay the registration fee.

In the courses outlined below, those marked with an * may be begun at any time during the session.

ANATOMY.

1. **Embryology.**—September 26th to March 11th. Fee \$25. Details on page 31.

2.* **Histological Technic.**—Laboratory at least three hours daily and conferences with instructors. Fee \$25.

3 and 4. **General Histology, Microscopical Anatomy.**—September 26th to March 11th. Details on page 31. Fee \$50.

CORNELL UNIVERSITY MEDICAL COLLEGE.

5.* **Dissection.**—See Courses I-V, page 32. Fee \$25 per term (ten weeks); or for the entire dissection, \$50.

6.* **Neuro-Anatomy.**—March 13th to May 27th. Details on page 32. Fee \$25.

7.* **Anatomical Research.**—Subject to special arrangement with head of department.

PHYSIOLOGY.

1. **General Physiology.**—Begins with Term III in March and continues in Term I of the following session. Details on page 35. Fee \$50.

2.* **Physiological Research.**—Subject to special arrangement with head of department.

CHEMISTRY.

1.* **Advanced Physical and Physiological Chemistry.**—Duration 10 weeks. Fee \$25.

2.* **Chemical Pathology.**—Duration 10 weeks. Fee \$25.

3.* **Detection and Estimation of Poisons.**—Duration 10 weeks. Fee \$25.

4.* **Research Work in Physiological Chemistry, Chemical Pathology, or Toxicology.**

Note.—Courses in this department are subject to special arrangement with head of department. Special students in this department must present satisfactory evidence of preliminary training in inorganic chemistry with laboratory work as outlined on page 23.

PHARMACOLOGY.

1.* **Laboratory Pharmacology,** under supervision and including conferences with instructor. Fee \$25.

2.* **Research Work in Pharmacology.**

MEDICINE.

1. **Applied Immunology.** (See Bacteriology).

CLINICAL PATHOLOGY.

1. **Laboratory Diagnosis.**—Elementary and advanced instruction is offered in all the tests commonly performed in a clinical laboratory. The time the course is given and the fee are to be arranged with Professor Thro.

2. **Wassermann and gonococcus complement fixation.**

Dr. Hans J. Schwartz. Fee \$50.

SURGERY.

1. **General Surgery.**—Offered only during those months when the wards of Bellevue Hospital, Second Surgical Division, are unoccupied by undergraduate students.

COURSES FOR GRADUATES.

The course consists of morning "rounds" with the visiting and assistant staff, and an afternoon operative clinic. Daily 9-11 A.M. and 2:30-6 P.M., March to May.

This course is offered without fee to graduates of this medical school.

2.* **Operative Surgery on the Cadaver.**—(Offered only to graduates in medicine.)

Course of	5 operations.....	\$20.00
"	" 10 "	30.00
"	" 20 "	40.00
"	" 40 "	60.00
"	" 80 "	90.00
"	" 100 "	100.00

3. **Operative Surgery.**—Regular undergraduate course, in second term only begins with Term III in March. Fee \$25.

OBSTETRICS.

1.* **Manikin Instruction.**—Obstetric operations and Diagnosis; 10 lessons. Fee \$20.

PATHOLOGY.

1.* **Pathological Anatomy and Autopsy Technics.**—First trimester.

2. **Neuro-pathology.**—Offered only in October to December

BACTERIOLOGY.

Applied Immunology. Drs. Coca and Cooke. *Clinical work* at the New York Hospital with the collaboration of the Department of Medicine. *Laboratory Course* in the College Laboratory. 1 month periods, February, June and July. Daily, 9-12 and two afternoons a week. Fee \$200. (For further details and synopsis address *the Secretary*.)

NEUROLOGY.

1. **Neuro-anatomy.**—See Department of Anatomy. The student must present satisfactory evidence of an adequate knowledge of general histology. Fee \$25.

3.* **Clinical Neurology.**—Includes study of ambulatory and ward cases, with medical and electrical therapeutics. Two hours daily for two months. Should be preceded by Courses 1 and 2 or their equivalent. Fee \$50.

4.* **Psycho-therapeutics.**—Twice weekly for eight weeks. Should be preceded or taken in conjunction with Course 3. Fee \$25.

DERMATOLOGY.

1.* **Clinical Dermatology.**—Ambulatory cases. Thrice weekly for six weeks. 2-3 P.M. Fee \$25.

LARYNGOLOGY AND RHINOLOGY.

1.* **Clinical Laryngology.**—Course of 15 lessons on diagnosis and therapeutics, including operative treatment. Fee \$25.

OPHTHALMOLOGY.

- 1.* **Ophthalmoscopy.** 20 hours. Fee \$25.
- 2.* **External Diseases of the Eye.** 20 hours. Fee \$25.
- 3.* **Diseases of the Eye Muscles.** 15 hours. Fee \$20.
- 4.* **Refraction and Retinoscopy.** 20 hours. Fee \$25.
- 5.* **Simulation of Amblyopia and Amaurosis.** 5 hours. Fee \$20.
- 6.* **Clinical Ophthalmology.** Daily 2-3 P.M. Fee per month, \$25.
- 7.* **Ophthalmic Operation on the Cadaver.** (This course is given in coöperation with the Department of Anatomy). 20 hours. Fee \$50.
- 8.* **Pathological Histology of the Eye.**—(This course is given in coöperation with the Department of Pathology, and must be applied for in advance.) 20 hours. Fee \$25.
- 9.* **Bacteriology of the Eye.**—(This course is given in coöperation with the Department of Pathology, and must be applied for in advance.) 15 hours. Fee \$20.

THE GRADUATE SCHOOL.

THE GRADUATE SCHOOL.

The scientific departments of the Medical College in New York City offer graduate instruction as an integral part of the Graduate School of Cornell University. Students who register in the Medical College for work leading to the degree of Doctor of Philosophy are in all cases subject to the rules and regulations of the Graduate School of Cornell University.

ADMISSION.

The Graduate School has exclusive control of all graduate work done in Cornell University. Graduates of the following colleges of the University, namely, the College of Arts and Sciences, the Medical College, the College of Architecture, the College of Civil Engineering, the Sibley College of Mechanical Engineering, and the New York State College of Agriculture,—or of other institutions in which the requirements for the first degree are substantially equivalent,—are eligible for admission to the Graduate School. In other cases, studies pursued after graduation, and experience gained by professional work or otherwise are taken into consideration in deciding whether the candidate's preparation as a whole is such as to justify his admission to the Graduate School.

In order to avoid delays at the beginning of the academic year, those who desire to enter the Graduate Course *in the Medical Sciences* are advised to make application for admission, either in person or by letter, in the preceding spring or summer. Correspondence should be addressed *to the Secretary of the Medical Faculty*, 477 First Avenue, New York City.

Before admission it will be necessary to present evidence of the degree already received, *i. e.*, either the diploma or a statement from some official source. The simplest procedure will ordinarily be to submit an official statement from the Registrar or Dean that the degree has been conferred. A blank form of certificate will be furnished on request.

All credentials lodged with the Medical College are in duplicate, one copy being submitted to the Graduate School at Ithaca for the approval of the Dean.

STUDIES.

The purpose of the graduate courses is to provide the student with the method and discipline of original research, to the ultimate end that he may contribute to the advancement of knowledge. In furnishing this opportunity for independent study and investigation in the Medical College the Graduate School seeks to make the conditions such as will enable the student to devote himself wholly to his chosen field. Unhampered by the restrictions that necessarily obtain in undergraduate work, he will come into freedom of association with older scholars, who will seek to make his work profitable to him by giving such aid and direction as he may need. Inasmuch as subjects differ greatly, the requirements for all subjects cannot be stated in terms at once specific and uniform. In some departments of knowledge, original research may begin with the student's entrance into the School; in

CORNELL UNIVERSITY MEDICAL COLLEGE.

other subjects much preliminary work is necessary to fit the student for profitable research.

MAJOR AND MINOR SUBJECTS.

The branch of knowledge to which the student intends to devote the larger part of his time is termed his major subject. The other fields of study selected, which will be necessarily more restricted in their scope, and which should in general be selected with reference to their direct bearing upon the major subject, are termed the minor subjects. Candidates for the doctor's degree are required to select a major subject and two minor subjects; for the master's degree, a major subject and one minor subject are required. A statement of the major and minor subjects, approved by the professors with whom the work is taken, must be presented to the Dean not later than two weeks after admission to the Graduate School. The studies selected by a graduate student who is not a candidate for an advanced degree, must be approved by some member of the faculty of the Graduate School, who acts as the student's adviser.

SPECIAL COMMITTEES.

The work of each candidate for an advanced degree is in charge of a committee consisting of two or more teachers under whom the major and minor subjects are pursued, the representative of his major subject being chairman. The student is expected to confer freely with the members of his special committee, not only in connection with individual courses of study but also in regard to the general plan of his work.

THE DEGREE OF DOCTOR OF PHILOSOPHY.

The degree of Doctor of Philosophy is granted to a student who, after completing not less than three years of resident graduate work, presents a satisfactory thesis and passes an examination.

The doctor's degree is intended to represent, not a specified amount of work covering a specified time, but long study and high attainment in a special field, proved in the first place by the presentation of a thesis which displays the power of independent investigation, and in the second place by passing corresponding examinations upon the ground covered by the major and minor subjects chosen at the beginning of the candidacy. The standard for the doctor's degree is determined by the attainment to the expected of an excellent student, who begins his work with adequate preparation, and devotes his whole time for three years to his major and minor subjects and his thesis.

Examinations for the doctor's degree will occur during the second week before Commencement, unless another date is set by the Dean. These examinations, which may be either oral or written, or both, at the option of the examining committee, are open to all members of the faculty. *Candidates who will have completed the other requirements for the degree in June, must apply to the Dean not later than April 15th for examination.*

THE GRADUATE SCHOOL.

The thesis for the doctor's degree must be of such character as shall demonstrate the candidate's ability to do original work, and must be satisfactory in style and composition. *A statement of the general subject of the thesis, with the written approval of the chairman of the special committee in charge of the candidate's work, must be furnished the Dean not later than December 1st of the academic year in which the degree is to be taken.* The completed thesis, approved by the special committee, must be presented to the Dean at least five days before the examination for the degree. This copy may be retained for use at the examination or for binding.

Each candidate for the doctor's degree must deposit one hundred printed copies of his thesis with the Librarian of the University. The thesis must have both a cover and a title page. The title page must include the statement that the thesis is presented to the Faculty of the Graduate School of Cornell University for the degree of Doctor of Philosophy. The author's name must be given in full, and, if the thesis is a reprint, the place and date of the original publication must be given. If the printing of the thesis is deferred until after Commencement the candidate must deposit a bound typewritten copy with the Dean not later than the Friday preceding Commencement. The size of the page in case of typewritten theses should be 8 x 10½ inches. This copy of the thesis becomes the permanent property of the Library.

Each candidate for the doctor's degree shall be required to deposit one hundred printed copies of his thesis with the Dean for the purposes of the university library. In exceptional cases this requirement may be met by depositing with the Dean for the purposes of the university library a bound typewritten copy of the thesis and one hundred printed copies of such a summary and such portion of the thesis as may be recommended by the chairman of the special committee and approved by the General Committee.

When all other requirements for the doctorate have been fulfilled, the degree may be conferred before the printed copies of the thesis have been received by the Dean, provided that the candidate present, at least five days before the degree is to be conferred, the bound typewritten copy of the thesis, together with a signed statement that publication will take place within a definite period, which period shall not exceed two years; and provided further that he deposit at the same time with the Treasurer of the University the sum of seventy-five dollars. The Treasurer is authorized to accept at his discretion as a guarantee a regularly executed bond instead of the deposit of money. The deposit will be returned if the prescribed number of printed copies of the thesis are furnished within the stated time. But in case the printed copies are not delivered within such time, the University reserves the right to use the deposit to defray the expense of printing the thesis or such portions of it as the Faculty may direct.

Candidates for the doctor's degree will ordinarily be expected to have a working knowledge of French and German before beginning graduate work; and in all cases *they must, before beginning their second year of residence, show to the satisfaction of their special committees that they possess a read-*

ing knowledge of those languages. If the subjects chosen by candidate are of such character as to make it desirable that he should be familiar with some foreign language other than French or German, the special committee may, with the consent of the Dean, permit the substitution of that language for one of the two required.

PERIOD OF RESIDENCE.

Not all students admitted to the Graduate School may expect to obtain the doctor's degree at the end of the minimum period of three years. Those whose undergraduate work has been insufficient in amount or too narrowly specialized, as well as those whose preparation in their special field is inadequate, must count upon spending some time—determinable by their proficiency—in work of a character not so advanced as that implied in the minimum residence requirement. The minimum residence requirement of three years applies only to graduates of other institutions who have pursued a course of study substantially equivalent to that required for the first degree in one of the colleges of this University.

Residence as a graduate student in another university may, by permission of the Faculty, be accepted as the equivalent of residence at this University. No general statement can be made regarding the conditions under which this permission will be granted; each case will be decided on its merits. A request for credit for resident work elsewhere must be approved by the student's special committee. At least one year's residence in this University is required in all cases.

Residence for a master's degree may be credited toward the residence required for the degree of Doctor of Philosophy, provided the special committee in charge of the work approves, certifying the work done as suitable for the doctor's degree.

Graduate work carried on by a candidate who is at the same time an instructor or an assistant in Cornell University is estimated on the basis of a four years' minimum residence requirement for the doctor's degree.

FEES.

A matriculation fee of \$10 is charged all students on entering the University. Tuition is \$75 per year, and each graduate student is also charged an administration fee of \$25 per year.

A graduation fee of \$20 is required of each person about to take an advanced degree. This fee must be paid at least ten days before Commencement. The amount will be refunded should the degree not be conferred.

Each student pursuing Laboratory Courses is required to deposit with the clerk of the college the sum of \$10 to cover breakage. A deposit of \$5 will be required of each student who desires to withdraw books from the library.

These deposits, less the amount charged for breakage, will be returned at the end of each year.

Tickets must be taken out and paid for at the beginning of the session.

All tuition and other fees may be changed or increased by the Trustees to take effect at any time without previous notice.

FACILITIES FOR GRADUATE STUDY AND COURSES OF INSTRUCTION.

The courses outlined in the following pages are offered by the Medical College in New York City, and are grouped primarily on the basis of subject matter. Under each subject there is given, in a separate paragraph, a list of courses some of which are too elementary in character to be likely to interest graduate students of that subject. There then follows a list of all those courses which, whether open or not open to undergraduates are deemed likely to be of profit to graduate students.

For courses in the medical sciences offered at Ithaca, the announcement of the Graduate School should be consulted.

ANATOMY.

Professors: C. R. STOCKARD, C. V. MORRILL, R. CHAMBERS, JR.

Instructors: G. PAPANICOLAOU, L. W. SNEED, J. F. NONIDEZ.

Abundant material and sufficient apparatus are available for advanced study and work in the various branches of anatomy, embryology, histology, comparative morphology, descriptive anatomy, and experimental anatomy. Students desiring to pursue graduate work in any of these branches must have had in their college courses preliminary training in general zoölogy and comparative anatomy. A reading knowledge of German and French is essential.

New York City offers exceptional advantages for obtaining fresh human material. The large slaughter-houses are accessible for comparative mammalian tissues and organs. The extensive collections of specimens and models in the city museums are extremely helpful and instructive to the advanced student.

The members of the staff offer courses in the various phases of anatomy in which they are especially engaged. The courses offered for the medical students appear in this announcement, and are particularly recommended to those students who have not pursued work of this kind. Technical and practical anatomical work are fully provided.

Preliminary Requirements.—Physics, Chemistry and Biology as required for admission to the Medical College.

Morphology; Embryology; Histological Technic; General Histology; Microscopic Anatomy and Organology; Descriptive Anatomy including courses in dissection of the human body; Demonstrations on the Cadaver; Live Anatomy; Topographical Anatomy; Neuro-Anatomy and Neuro-Histology; Applied Anatomy; Organs of Special Sense; Anatomical Research.

Anatomy of the Living Body.—Assistant Professor Morrill.

Special and Topographical Studies of Different Regions.—Professors Stockard and Morrill.

Human Histology and Histogenesis.—Assistant Professor Chambers and Dr. Nonidez.

CORNELL UNIVERSITY MEDICAL COLLEGE.

Comparative Embryology.—Assistant Professor Chambers and Dr. Nonidez.

Experimental Morphology.—Professor Stockard.

Anatomy of the Infant and Postnatal Development.—Professor Stockard.

PHYSIOLOGY.

Professor: G. LUSK.

Lecturers: D. J. EDWARDS, S. GOLDSCHMIDT.

Students desiring to elect physiology as a major course, in addition to completing the course in general physiology given to medical students, will be required to undertake some special problems, preferably dealing with aspects of nutrition or circulation. Students electing physiology as a minor course may select either the work in general physiology given to medical students or may select only a portion of this course (e. g., nutrition, circulation, etc.) provided an additional amount of special work in these subjects is undertaken.

A preliminary knowledge of chemistry—analytical, organic and physiological, as well as of physics—is requisite for those who select physiology as a major.

General Physiology. Comprising Nerve Muscle Physiology, Central Nervous System, Special Senses, Respiration, Circulation, Secretion, Digestion, Metabolism.

Physiology of Nutrition.—Professor Lusk; Dr. Goldschmidt.

Physiology of Circulation.—Dr. Edwards.

PHYSIOLOGICAL CHEMISTRY AND CHEMICAL PATHOLOGY.

Professor: S. R. BENEDICT.

Instructors: T. P. NASH, E. OSTERBERG, E. FRANKE.

The laboratories available for advanced work and research in physiological chemistry and chemical pathology include those of the Department of Chemistry, located in the main College building, the new chemical laboratories at Bellevue Hospital, and a research laboratory in the General Memorial Hospital. These laboratories provide adequate equipment for investigation in a great variety of special problems in the chemistry of the plant, animal or human organism in health or disease, by chemical, physical, or optical methods. In the College library the principal journals relating to these subjects are on file.

Students expecting to pursue investigation in physiological chemistry or chemical pathology should have adequate preliminary training in inorganic, analytical and organic chemistry, as well as in physics, physiology, and physical chemistry, though a study of these latter subjects could be pursued at the College, together with more advanced work in special lines.

Organic and Physiological Chemistry; Research.

Physiological Chemistry.—Professor Benedict.

Chemical Pathology.—Professor Benedict.

FACILITIES FOR GRADUATE STUDY.

PATHOLOGY AND BACTERIOLOGY.

Professors: J. EWING; W. J. ELSE; O. H. SCHULTZE; J. C. TORREY;
E. S. L'ESPERANCE.

Instructors: A. F. COCA; G. W. WHEELER; M. C. KAHN; A. H. RAHE.

The laboratories of pathology, bacteriology and hygiene occupy the fourth floor of the main building and the third and fourth floors of the Loomis Laboratory. The equipment includes all the means commonly employed in pathological research and much new and original apparatus. Both laboratories are provided with suitable quarters for the care of animals. The departmental library includes about 8,000 bound volumes and a large and valuable collection of monographs and reprints. There is an extensive collection of specimens illustrating pathological histology, much material for histological study, and a museum containing about 2,000 specimens. The recent material from the autopsies at several hospitals is constantly available for study, and furnishes a supply of problems in many fields, which is practically inexhaustible. Applicants who have been admitted to the Graduate School are urged to present the degree of Doctor of Medicine for admission to these courses. A limited number of fellowships is available in this department.

Preliminary requirements.—Anatomy, including Histology and Embryology.

General Pathology; Special Pathology; Pathological Anatomy; Medico-legal Pathology; Autopsy Technics; Experimental Pathology; Bacteriology; Immunology; Hygiene and Preventive Medicine.

General Pathology.—Professor Ewing.

Special Pathology.—Professors Ewing and L'Esperance.

Bacteriology.—Professor Else, Dr. Wheeler and Mr. Rahe.

Immunology and Serology.—Professor Else and Dr. Coca.

Preventive Medicine and Hygiene.—Professor Torrey.

PHARMACOLOGY.

Professors: R. A. HATCHER, C. EGGLESTON.

The laboratory of pharmacology, in the Loomis Laboratory, is well equipped for general work and research in pharmacology, and special opportunities will be afforded for doing work involving the action of drugs on the circulatory system, and methods of biological testing of drugs and medicines, either supplementing or replacing chemical tests for activity and identity.

The departmental library is sufficient for the immediate needs of workers, and its facilities are readily amplified by the College and other libraries near by which furnish every opportunity for extending the work.

A preliminary knowledge of Chemistry and Physiology is required.

Materia Medica and Pharmacy; Pharmacology.

Research in the Pharmacodynamics of Drugs.—Professors Hatcher and Eggleston.

Toxicology.—Professors Hatcher and Eggleston.

CORNELL UNIVERSITY MEDICAL COLLEGE.

FACULTY OF MEDICINE AT ITHACA

ALBERT WILLIAM SMITH, B.M.E., M.M.E.,
Acting President.

ABRAM TUCKER KERR, B.S., M.D.,
*Secretary of the Medical College at Ithaca,
Professor of Anatomy.*

SIMON HENRY GAGE, B.S.,
Professor of Histology and Embryology, Emeritus.

BENJAMIN FREEMAN KINGSBURY, Ph.D., M.D.,
Professor of Histology and Embryology.

SUTHERLAND SIMPSON, D.Sc., M.D., F.R.S. (Edin.),
Professor of Physiology.

JAMES BATCHELLOR SUMNER, A.M., Ph.D.,
Assistant Professor of Biochemistry.

JAMES WENCELAS PAPEZ, A.B., M.D.,
Assistant Professor of Anatomy and Neurology.

STANLEY ROSS BURLAGE, M.A.,
Instructor in Physiology.

AARON BODANSKY, B.S., Ph.D.,
Instructor in Biochemistry.

HOWARD S. LIDDELL, A.B.,
Instructor in Physiology.

JOHN STEPHENS LATTI, B.S., Ph.D.,
Instructor in Histology and Embryology.

RUFUS R. HUMPHREY, A.M.,
Instructor in Histology and Embryology.

RAYMOND O. HITCHCOCK, A.B.,
Assistant in Anatomy.

HOWARD B. ADELMANN, A.B.,
Assistant in Histology and Embryology.

OTTO A. DEARTH, B.S.,
Assistant in Histology and Embryology.

DOROTHY SEWELL, A.B.,
Assistant in Histology and Embryology.

EVELYN HOLT, A.B.,
Assistant in Anatomy.

SAMUEL H. BASSETT, A.B.,
Assistant in Anatomy.

LOUISA KEASBEY, A.B.,
Assistant in Physiology.

FRANCIS D. GUNN,
Student Assistant in Histology and Embryology.

ITHACA DIVISION.

INSTRUCTION AT ITHACA.

DURING THE FIRST YEAR OF THE COURSE.

CALENDAR FOR ITHACA.

First Term, 1921-1922.

- September 21st, Wednesday—Academic year begins; matriculation of new students; University scholarship examinations begin.
September 22nd, Thursday—Matriculation of new students.
September 23rd, Friday—Registration of matriculated students.
September 26th, Monday—Instruction begins in all departments of the University at Ithaca. President's annual address to students at 12 M.
December 22nd, Thursday—Instruction ends at 1 P.M.
January 5th, Thursday—Instruction resumed at 1 P.M.
January 11th, Wednesday—Founder's Day.
February 8th, Wednesday—First term closes.

Second Term.

- February 10th and 11th—Friday and Saturday—Registration for the second term.
February 13th, Monday—Instruction begins at 8 A.M.
April 5th, Wednesday—Instruction ends at 1 P.M. (Spring recess.)
April 12th, Wednesday—Instruction resumed at 1 P.M.
May 20th, Saturday—Navy Day.
June 21st, Wednesday—Commencement.

General Statement.

From its very foundation Cornell University has offered special courses for students preparing for the study of Medicine; first in the Natural History course, and later also in a special two-year Medical Preparatory course. In 1898 the Medical College was established in New York City with a four years' course. At the same time the work of the first year was duplicated at the University in Ithaca, since many of the fundamental scientific subjects of which this part of the course mainly consists were already provided for in the long-established departments of Botany, Zoölogy, Comparative Anatomy, Physics, Chemistry, Physiology, Histology, Embryology, and Bacteriology. The courses in these departments were modified where necessary and additional courses were added so as to make the work at Ithaca equivalent to the first year in New York City.

Among the facilities of the University of special value to the Medical College may be mentioned the museums of Vertebrate and Invertebrate Zoölogy (including Entomology and Comparative Anatomy), of Agriculture, of Botany, of Geology, and of Veterinary Medicine. The University Library, with its 560,000 volumes and pamphlets, and over 2,500 current periodicals

CORNELL UNIVERSITY MEDICAL COLLEGE.

and transactions, is as freely open to medical students as to other University students.

Through the generosity of the late Dean Sage, of Albany, the University has been enabled to erect a building especially designed for anatomy, histology, embryology, and physiology. The building is constructed of Ohio sandstone. The general form is that of an E, 157 feet long and 50 feet wide with wings 40 feet square.

In the cellar are the cold-storage, embalming, cremating rooms and store-rooms.

In the sub-basement at the west end is a large room for the string galvanometer and the accessory dark rooms.

In the basement are the ventilating and cold-storage machinery, a large lecture room, a recitation room, and an advanced laboratory for biochemistry and histology, besides the lower part of the large amphitheatre. Here also is located the operating room for the department of physiology.

On the first floor are located the coat rooms for men and women, college office, library, reading room, faculty room, and histology and neurology research laboratory, general laboratory for experimental physiology, demonstration and dark room for physiology, and the upper part of the large amphitheatre.

On the second floor is the department of histology, with a large general laboratory, a research laboratory, preparation rooms, and private laboratories for the instructors. Upon this floor also is located the department of Physiology with a large general laboratory for biochemistry, a research laboratory for biochemistry, a research laboratory for experimental physiology, a metabolism room, an incubator room, repair shop and private laboratories for the instructors.

The third floor consists of the general and special dissecting rooms, study rooms, and amphitheatre, besides rooms for the instructors.

The attic is utilized for photography, macerating the skeletons, and for storage.

The air in the building is constantly changed by forced ventilation. The lighting is especially good in all the rooms.

In the court behind the building is a house for alcohol and inflammables and provision for experimental animals, including a small animal house. A large animal house is located at some distance from the medical building on the University farm.

DEPARTMENTS, METHODS AND FACILITIES.

ANATOMY.

ABRAM T. KERR, B.S., M.D., *Professor.*

JAMES W. PAPEZ, A.B., M.D., *Assistant Professor of Anatomy and Neurology.*

RAYMOND O. HITCHCOCK, A.B., *Assistant.*

SAMUEL H. BASSETT, A.B., *Assistant.*

EVELYN HOLT, A.B., *Assistant.*

The curriculum is so arranged that the students may devote a large amount of continuous time to each subject. Most of the work in gross Anatomy is concentrated in the first term of the first year and consists mainly of practical work in the laboratory. During this term twenty-two hours a week are allowed for this work, but the laboratory is open week days except Saturday from 8 to 5 and those students who have other free hours may devote extra time to the subject. Each student is independent of the others and those with special training or ability are permitted to do more than the required work and where they have the time they are encouraged to do advanced or research work.

During the first term the abdominal walls and viscera including the pelvis, the thoracic walls, and viscera, and the head and neck are dissected. For this work there is an ample supply of dissecting material that is well embalmed and kept in cold storage so as to be ready for use when needed. In addition the department is well equipped with models, special preparations, and dissections for study and demonstration. A complete disarticulate skeleton is lent to each student at the beginning of the term so that the bones will be available for study whenever they are encountered in the course of the dissection. The various organs and parts are studied first topographically and then the finer structure is considered in sufficient detail to connect the gross anatomy with the Histology and Physiology. For this purpose a supply of lenses and binocular dissecting microscopes is available in the laboratory. Individual conferences and demonstrations are conducted on each stage of the work and in addition occasional recitations are held during the progress of the dissection. The students are encouraged to make careful notes and as many drawings as the time will permit, and they are taught to connect the dissecting room findings with the conditions in the live body. The object of the course is to make careful accurate observers and clear, independent thinkers as well as to teach structure of the body. A student library containing atlases and some of the more important anatomical monographs is provided in the laboratory.

During the first half of the second term the gross anatomy of the central nervous system is studied in the laboratory. The students dissect the human brain and spinal cord and its membranes. The same methods are used as in the first term. In addition two hours a week are devoted to con-

CORNELL UNIVERSITY MEDICAL COLLEGE.

ferences, demonstrations, and recitations, upon the structures which have been dissected during the first term.

The department is well equipped to provide facilities for those properly qualified to undertake advanced and research work.

Courses 1, 2, 3, 5 and 6 given below are required of medical students.

For other courses not primarily for medical students consult the announcement of the College of Arts and Sciences.

1. Anatomy of the Head and Neck.—First Term. Credit, 4 hours, 22 actual hours a week for 7 or more weeks. Professor Kerr and Papez, Assistants Hitchcock, Bassett and Holt. Laboratory work, dissection, and conferences.

2. Anatomy of the Thoracic Walls and Viscera.—First term. Credit, 1 hour, 22 actual hours a week for 2 or more weeks. Professors Kerr and Papez, Assistants Hitchcock, Bassett, and Holt. Laboratory work, dissection, and conferences.

3. Anatomy of the Abdominal and Pelvic Walls and Viscera.—First term. Credit, 4 hours, 22 actual hours a week for 7 or more weeks. Professors Kerr and Papez, Assistants Hitchcock, Holt and Bassett. Laboratory work, dissection, and conferences.

5. The Nervous System, Anatomy, Histology, and Development.—Second term, credit, 4 hours, Assistant Professor Papez. Twelve hours a week laboratory with laboratory demonstrations, conferences and recitations. Dissection of the spinal cord and brain. Microscopic structure and development of the nervous system and organs of special sense.

6. Anatomy of the Living Body.—Second term. Credit, 1 hour, 2 actual hours a week. Professor Kerr. Interpretation of dissecting room material by means of the living body, frozen sections, and special preparations. A review of the work of courses, 1, 2, and 3.

7. Anatomy of the Upper Extremity.—First and second terms. Credit, 2 to 3 hours. Professors Kerr and Papez and assistants. Laboratory work, dissection, and conferences.

8. Anatomy of the Lower Extremity.—First and second terms. Credit, 2 to 3 hours. Professors Kerr and Papez and assistants. Laboratory work, dissection, and conferences.

9. Topographical Anatomy.—First and second terms. Credit, 2 to 5 hours. Prerequisite anatomy courses 1, 2, 3, 7, or 8. The detailed dissection and study of any region. Professor Kerr.

12. Research in Anatomy.—First and second terms. Professors Kerr and Papez. Advanced and research work in the laboratories. Open only to those who have taken the necessary preliminary courses, and are properly qualified.

ITHACA DIVISION.

HISTOLOGY AND EMBRYOLOGY.

B. F. KINGSBURY, Ph.D., M.D., *Professor.*

JOHN S. LATTA, Ph.D., *Instructor.*

RUFUS R. HUMPHREY, A.M., *Instructor.*

HOWARD B. ADELMANN, A.B., *Assistant.*

OTTO A. DEARTH, B.S., *Assistant.*

DOROTHY SEWELL, A.B., *Assistant.*

FRANCIS D. GUNN, *Student Assistant.*

As indicated by the following courses, this department offers elementary and advanced instruction in the theory and use of the microscope and its accessories, in vetebrate histology, and vertebrate embryology; and opportunities for research in all of these subjects.

The material equipment consists of a good supply of modern microscopes, while camera-lucidas, polariscopes, micro-spectroscopes, photo-micrographic cameras, microtomes and other special apparatus are in sufficient numbers to give each student opportunity for personally learning to use them, and for applying them to any special study in which they are called for. Two projection microscopes are available for class demonstrations and for making the drawings used in reconstruction. The collection of histologic and embryologic specimens is extensive and constantly increasing.

The rooms for the use of the department are on the second floor of Stimson Hall. They are almost perfectly lighted and consist of a large general laboratory, an advanced laboratory, a preparation room, department office, and five private laboratories for the instructing staff, where also special demonstrations of difficult subjects are given to small groups of students.

The collection of material and microscopic series of human embryology, contributed mainly by graduates of the college, is steadily growing. Every encouragement is given for the fullest utilization of the opportunities afforded by the department.

The work of the department consists of practical laboratory work, supplemented by lectures, conferences, and demonstrations. The work required of students of medicine is given in two courses, 10 and 5. For those who have already had elsewhere satisfactory work in histology, elective work may be taken in Courses 3, 7, and 8. Courses open to students in the College of Arts and Sciences and Veterinary Medicine are described in the announcements of these colleges.

COURSES REQUIRED OF STUDENTS OF MEDICINE.

10. Histology.—First term. Credit, 6 hours. Professor Kingsbury and assistant. Required of first-year students of medicine. Four laboratory periods and two lectures each week. The work includes (a) The fundamentals of human development; (b) The histology of the tissues and organs (except the nervous system and organs of sense); (c) the main facts of histogenesis and the development of the organs (except nervous system and sense organs). It is highly advantageous that the course be

CORNELL UNIVERSITY MEDICAL COLLEGE.

preceded by a course in embryology (see Courses of Instruction of the College of Arts and Sciences, Course 4).

10a. Histology.—First term. Credit, 3 hours. Professor Kingsbury. Special topics in histology and embryology, designed for those who have had acceptable courses in histology and embryology, and to serve as a review. Two laboratory periods and one lecture-conference each week.

ADVANCED AND ELECTIVE COURSES.

3. Special Histology and Technique.—First term. Credit, 3 hours. Instructor ————. One recitation, demonstration, or lecture, 8 T. Two laboratory periods by assignment.

In this course a more detailed knowledge of histology and facility in technique is gained by practical work in one or more of the fields of histology or embryology. Designed for those who desire a better working knowledge of histology for use in Biology or Medicine.

7. Advanced Work in Histology and Embryology.—First and second terms. Professor Kingsbury and Instructors. Laboratory work, eight or more actual hours a week, with Seminary (Course 8).

This course is designed for those preparing theses for baccalaureate or advanced degrees, and for those wishing to undertake special investigations in histology and embryology.

Course 7 is open to those who have had Courses 10 and 3, or their equivalents. A good reading knowledge of French and German is indispensable for the most successful work in this course. It is suggested that those who intend to take this course confer with the head of the Department as early as possible, so that the work may be planned to the best advantage.

8. Seminary.—First and second terms. One hour each week at an hour to be arranged.

For the discussion of current literature and the presentation of original work by the members of the Department staff and those doing advanced work in the Department. It may be taken in connection with Course 3 or Course 7.

DEPARTMENT OF PHYSIOLOGY AND BIOCHEMISTRY.

SUTHERLAND SIMPSON, M.D., D.Sc., F.R.S. (Edin.), *Professor of Physiology.*

JAMES B. SUMNER, A.M., Ph.D., *Assistant Professor of Biochemistry.*

S. R. BURLAGE, M.A., *Instructor in Physiology.*

A. BODANSKY, B.S., Ph.D., *Instructor in Biochemistry.*

H. S. LIDDELL, A.B., *Instructor in Physiology.*

LOUISA KEASBEY, A.B., *Assistant in Physiology.*

Physiology.

This subject is taught in the first and second terms of the first year, and the work is carried on by means of lectures, recitations, demonstrations, and

ITHACA DIVISION.

practical laboratory instruction. In the laboratory the student is made to carry out for himself experiments which demonstrate the fundamental facts of the science, and he is taught to draw conclusions from these facts. Special attention is given to experimental methods which are likely to be of importance in the study of clinical medicine.

The following courses are offered:

1. Physiology of the Cell, Muscle, Nerve, Heart and Circulation, and Respiration.—First term. Credit, 2 hours. Professor Simpson, and assistants. Three lectures or recitations weekly with demonstrations, where necessary. At frequent intervals written and oral examinations will be held.

1A. Physiology of Blood, Lymph and Certain Aspects of Circulation.—First term. Credit, 1 hour. Mr. Burlage. One lecture weekly, written quizzes, and reference reading.

2. Physiology of Digestion, Excretion, Internal Secretion, Animal Heat, and Reproduction.—Second term. Credit, 3 hours. Professor Simpson, and assistants. Five lectures or recitations weekly for the first ten weeks of the term, with demonstrations and examinations as in Course 1. The latter part of this course will be taken up with a review of the whole subject.

4. Experimental Physiology.—Second term. Credit, 4 hours. Professor Simpson, Instructor Liddell and assistants. Two five-hour laboratory periods a week. In this course the physiology of the cell, muscle, nerve, heart and circulation, respiration, alimentary system including liver and pancreas, internal secretion, body temperature and animal heat, nervous system and special senses will be studied practically by each student individually under the direct superintendence of the professor and assistants. The course will be supplemented by demonstrations whenever necessary. Practical examinations will be held from time to time, and the student's knowledge of the work tested orally at each meeting.

4A. Experimental Physiology.—Second term. Credit, 1 hour. Instructor Burlage. One 3-hour laboratory period a week. In this course the physiology of blood, blood-pressure and pulse in man, polygraphic and electrocardiographic work will be studied practically.

5. Physiology of the Nervous System and Special Senses.—Second term. Credit, 2 hours. Professor Simpson. This is given as a special course of lectures, five weekly for the last six weeks of the term, after the student has studied the anatomy of the brain and spinal cord, and special sense organs.

7. Seminary.—Second term. Credit, 1 hour. A seminary is held in association with Biochemistry at which current literature is discussed, and the results of original investigations carried on by workers in the laboratories are presented for criticism. Students are required to attend these meetings and to take part in the discussions, and each student is expected to give a communication on at least one occasion during the term.

8. Advanced Work and Research.—The laboratory is open daily from 8 A.M. till 6 P.M. for advanced work and original investigation under the direction of the professor and assistants.

Biochemistry.

In this section the student is taught the chemistry of the tissues, fluids, sections, and excretions of the human body; the composition of food-stuffs, and the phenomena of their digestion, absorption, and assimilation; the rôle of enzymes in the animal economy; the principles of nutrition; and the leading facts of general and special metabolism. Organic chemistry is reviewed with particular reference to the needs of the student of medicine and the principles of physical chemistry and their application in the study of the cell processes are taught in the lecture room and laboratory. Instruction is given in the use of analytical methods for the examination of biological products, both normal and pathological. Those methods are principally considered which have found an application in scientific medicine, and special attention is devoted to the quantitative analysis of the gastric contents, milk, and urine. Each student completes the course of performing a metabolism experiment upon himself.

The bulk of the instruction is given in the laboratory. As occasion arises, the student's individual work there is supplemented by experimental demonstrations; while by means of lectures and recitations it is sought to coördinate the whole, and to expound the theoretical aspects of the subject.

The following courses are offered:

15A. General Biochemistry.—First term. Credit, 4 hours. Three lectures or recitations and one three-hour laboratory period weekly, supplemented by demonstrations, conferences, and written reviews. Assistant Professor Sumner and Mr. Bodansky. Required of first year students of medicine.

15B. General Biochemistry.—Second term. Continuation of 15A. Credit, 5 hours. Three lectures or recitations and three three-hour laboratory periods weekly; supplemented by demonstrations, conferences and written reviews. Assistant Professor Sumner and Mr. Bodansky. Required of first year students of medicine.

17. Special Chapters in Biochemistry.—First term. Credit, 1 hour. Assistant Professor Sumner. One lecture weekly on some selected province of biological chemistry. Hour to be arranged. This is an elective course for advanced students or graduates.

20. Advanced and Research Work in Biochemistry.—First and second terms. Assistant Professor Sumner. The laboratory is open daily to all qualified persons for advanced instruction or the prosecution of research. Courses are arranged to suit the training and requirements of the individual student.

7. Seminary.—See Physiology, Course 7.

ITHACA DIVISION.

SCHEDULE AND SUMMARIZED STATEMENT.

In this schedule the counts or University hours are given on the following basis: One recitation or lecture weekly for one term or half year gives a credit of one; for laboratory work it requires two and one-half actual hours weekly for a term or half year to secure a credit of one.

SCHEDULE OF REQUIRED COURSES.

First Term.

	No. of Course	University Hours	Actual Hours Weekly
Anatomy	1 to 3	9	22
Physiology	1	3	3
Biochemistry	15A	4	6
Histology	10	6	14
		—	—
		22	45

Second Term.

Physiology	2	3	3
Physiology	4	5	12
Physiology	5	2	2
Physiology	7	1	1
Biochemistry	15	5	11
Anatomy	5	4	12
Anatomy	6	1	2
		—	—
		21	43

SUMMARY OF REQUIRED COURSES.

First Term.

1. **Anatomy of the Head and Neck.**—Credit, 4 hours, 22 actual hours a week for 7 weeks. Professor Kerr and assistants. Laboratory work, dissection, and conferences.

2. **Anatomy of the Thoracic Walls and Viscera.**—Credit, 1 hour, 22 actual hours a week for 2 weeks. Professor Kerr and assistants. Laboratory work, dissection, and conferences.

3. **Anatomy of the Abdominal and Pelvic Walls and Viscera.**—Credit, 4 hours, 22 actual hours a week for 7 weeks. Professor Kerr and assistants. Laboratory work, dissection, and conferences.

1. **Physiology of the Cell, Muscle, Nerve, Heart and Circulation, and Respiration.**—Credit, 2 hours. Professor Simpson and assistants. Three lectures, demonstrations, or recitations weekly.

CORNELL UNIVERSITY MEDICAL COLLEGE.

1A. Physiology of Blood, Lymph, and Certain Aspects of Circulation.—Credit, 1 hour. One lecture weekly.

15A. General Biochemistry.—Credit, 4 hours. Three lectures or recitations and one three-hour laboratory period weekly supplemented by demonstrations, conferences, and written reviews. Assistant Professor Sumner and Mr. Bodansky.

10. Histology.—Credit, 6 hours. Professor Kingsbury and assistant. Four laboratory periods and two lectures each week.

Second Term.

2. Physiology of Respiration, Digestion, Excretion, Internal Secretion, Animal Heat, and Reproduction.—Credit, 3 hours. Professor Simpson and assistants. The latter part of the course will be taken up with a review of the whole subject. Five lectures or recitations weekly for the first ten weeks of the term with demonstrations and examinations.

4. Experimental Physiology.—Credit, 4 hours. Professor Simpson and Instructor Liddell. Two five-hour laboratory periods a week. This course will be supplemented by demonstrations whenever necessary.

4A. Experimental Physiology.—Credit, 1 hour. Instructor Burlage. One 3-hour laboratory period a week.

5. Physiology of the Nervous System and Special Senses.—Credit, 2 hours. Professor Simpson. Five lectures a week for the last six weeks of the term.

15B. General Biochemistry.—Credit, 5 hours. Two lectures or recitations and three three-hour laboratory periods weekly, supplemented by demonstrations, conferences, and written reviews. Assistant Professor Sumner and Mr. Bodansky.

5. The Nervous System Anatomy, Histology, and Development.—Credit 4 hours. Assistant Professor Papez. Twelve actual hours a week. Dissection of the spinal cord and brain. Microscopic structure of the nervous system and organs of special sense.

6. Anatomy of the Living Body.—Credit, 1 hour, 2 actual hours a week. Professor Kerr. Interpretation of dissecting room material by means of the living body, frozen sections, and special preparations. A review of the work of courses 1, 2, and 3.

7. Seminary. Physiology.—Credit, 1 hour. Each student is expected to give a communication on at least one occasion during the term.

REQUIREMENTS FOR ADMISSION.

The requirements for admission are identical with those of the Medical College at New York City (see page 23).

ITHACA DIVISION.

THE COMBINED A.B. AND M.D. DEGREES.

It will be seen from Section II of the requirements for admission that the two degrees, Bachelor of Arts and Doctor of Medicine, may be obtained in seven years. The first three years must be taken in a College of Arts and Sciences. The fourth year is the first year in the Medical College, and may be pursued either at Ithaca or in New York City. At the end of it the student receives the degree of A.B. The last three years are taken entirely in the Cornell University Medical College at New York City.

In the first and second years of the course in Arts and Sciences at Cornell University, a student must complete at least six hours of work in English; six hours in one or more modern languages other than English; six hours in Philosophy and Mathematics; and six hours in Science.

The previous training and the personal aptitude and liking of students varies so greatly that it seems inadvisable to recommend fixed requirements for all. The following recommendations where they are specific as to courses apply to students in Cornell University. Students in their first year in college should study English, and unless they have a reading knowledge of both French and German they should take up the language in which they are deficient. It is advisable in this year to take Physics, lectures and recitations, course 2, and three hours of the laboratory course 10. It is also desirable to begin Biological work in this year taking course 1 in Zoölogy.

In the second year Chemistry should be started, the student taking Elementary Inorganic Chemistry, course 1, in the first term, and Qualitative and Quantitative Analysis, course 6, in the second term. Comparative Anatomy, course 3, and Comparative Morphology, course 4, are desirable subjects at this time. Psychology should be taken this year and such other courses in Philosophy as appeal to the individual student. Elementary Economics is advised and such courses in History as are warranted by the previous study.

In the Junior year it is recommended that students take Organic Chemistry, course 32; Histology, course 1, and Embryology, course 4. Other desirable courses are Social Science, course 55; Citizenship, course 57; Histology, courses 2 and 3; Anatomical Methods, course 22; Public Speaking, Free Hand Drawing, and additional work in History and Philosophy, Photography, X-Ray photography, more Organic Chemistry and Physical Chemistry, Parasitology, and Medical Entomology, Botany and Mathematics. It is strongly recommended that freshmen should plan at the beginning of their course the work of the three years in Arts. The Secretary of the Medical College will be glad to confer with students who expect to study medicine and to help them arrange their plan of Arts work so as to meet best their individual needs.

RESIDENCE AND REGISTRATION.

The college year is nine months long, extending from the last of September till about the middle of June, and is divided into two nearly equal terms. (For exact dates, see calendar on page 95.)

CORNELL UNIVERSITY MEDICAL COLLEGE.

No credit is given for work done in absentia. For leave of absence during the session, application should be made to the Secretary.

At the beginning of the term students must register with the University Registrar, in Morrill Hall. After registration with the University Registrar, they must register with the Secretary of the Medical College, in Stimson Hall.

EXAMINATIONS.

Students are advanced in course from one year to the next upon passing examinations upon the work of that year. The work of each year is considered final of itself. There is no unnecessary repetition of subjects taught from year to year. According to the usage of the other colleges, the University student found to be markedly deficient will be dropped from the College at the end of the term in which such deficiency is shown. In the case of a student so dropped, an application for re-admission will not be entertained until after the expiration of one term.

ADVANCEMENT FROM FIRST TO SECOND YEAR.

Upon the completion of the year in Ithaca, the student must obtain from the Faculty a statement of all the work which he has done; and accompanying this statement must be a recommendation that he be allowed to register in the New York division of the Medical College. As a student is not advanced from one year to another in the New York division until all the work of the year is completed, a student from Ithaca cannot enter the second-year class in New York until the entire schedule of the first year has been successfully completed. For removing any conditions, examinations are held at the beginning of the fall term, both in Ithaca and in New York City. The student is at liberty to take these examinations in Ithaca or in New York City. The examination on a subject in either place is final for that year. That is, the student will not be permitted to try an examination on a subject in Ithaca, and take advantage of the later date for the examination in New York to have a second examination on the same subject in the same autumn.

CHARGES FOR INSTRUCTION.

FIRST YEAR.

Matriculation	\$10.00
Tuition	300.00
Laboratory Fees	35.00
	\$345.00

All tuition and other fees may be changed or increased by the Trustees to take effect at any time without previous notice.

To secure payment for breakage of instruments, apparatus, etc., each student is required to deposit with the treasurer \$10. This deposit, less the amount charged for breakage, will be returned at the end of the year.

ITHACA DIVISION.

RESIDENTIAL HALLS.

The University has five residential halls for men students situated on the Campus and furnishing accommodations for about 420 men. For particulars address University Treasurer, Ithaca, N. Y. There are, also, many private boarding and rooming houses near the University Campus. In these the cost of board and furnished room, with heat and light, varies from \$8 to \$12 a week. By the formation of clubs, students are sometimes able to reduce their expenses for room and board. Cafeterias are maintained by the University in Cascadilla Hall and in Sibley, and one by the College of Agriculture in the Home Economics Building, where meals may be obtained at nominal prices.

Before engaging rooms, students should carefully examine sanitary conditions and should particularly insist on satisfactory and sufficient fire escapes. The University publishes and distributes a list of approved rooming houses. This list is ready for distribution August 15. New students are advised to come to Ithaca a few days in advance of the beginning of the University duties in order that they may have ample time to secure room and board before the opening of the academic year. The Freshman Advisory Committee offers its assistance to new students in the selection of rooming and boarding houses.

The residential halls for women students are Sage College and Prudence Risley Hall. In these buildings, which are exclusively for women students, the total cost of board, laundry and rent of furnished rooms, with heat and light, is \$400 a year. The halls are heated by steam, and lighted by electricity. The University Adviser of Women has jurisdiction over all women students in the University, and women students are not permitted to board and lodge outside of the halls for women except in houses approved by the Adviser, and subject to her direction. Prospective women students should write to the Adviser of Women for information concerning any matters in which they may need assistance. Dormitory facilities for women are inadequate, and prospective students desiring such accommodations are urged to make early application. Inquiries in regard to board and rooms in the women's halls should be addressed to The Manager of Residential Halls, Sage College, Ithaca, N. Y.

CORNELL UNIVERSITY MEDICAL COLLEGE

ITHACA, N. Y.

FIRST YEAR—SESSION 1920-1921—FIRST TERM

	8	9	10	11	12	2	3	4	5
Mon.	Bio. Chem.	Anatomy				Histology 10			
Tues.	Phys.	Anatomy				Biochemistry			
Wed.	Bio. Chem.	Anatomy				Histology 10 Histology 10a			
Thurs.	Hist. 10	Phys.	Anatomy			Histology 10			
Fri.	Hist. 10	Bio. Chem.	Anatomy			Histology 10 Histology 10a			
Sat.	Hist. 10a	Phys.	Anatomy						

FIRST YEAR—SESSION 1920-1921—SECOND TERM

	8	9	10	11	12	2	3	4	5
Mon.	Nervous System					Nervous System			
Tues.	Anat. Rev.	Phys.	Physiology			Physiology			
Wed.	Phys.	Nervous System							
Thurs.	Anat. Rev.	Phys.	Physiology			Physiology			
Fri.	Phys.	Bio. Chem.	Biochemistry			Biochemistry			Phys. Sem.
Sat.	Phys.	Bio. Chem.	Biochemistry						

NOTE. The Faculty expressly reserves the right to make alterations in the curriculum, whenever advisable and without notice.

GRADUATES, 1920.

Doctors of Medicine, June 10, 1920.

Flora Adams.....	Worcester Memorial Hospital
A.B., 1915, Wellesley College.	
Harold Biscoe Adams.....	Roosevelt Hospital
A.B., 1917, Columbia University.	
Else Anna Sophie Barthel...	New York Infirmary for Women and Children
B.S., 1916, Barnard College.	
Robert J. Beck.....	Newark City Hospital
A.B., 1913, Pennsylvania College.	
Harold Stewart Belcher.....	New York Hospital
A.B., 1916, Cornell University.	
Donald Cheesbrough Bell.....	French Hospital
A. B., 1917, University of Wisconsin.	
Ralph Blumberg.....	City Hospital
A.B., 1914, Colgate University.	
Emma Irene Boardman.....	Woman's Hospital, Phila.
A.B., 1915, Smith College.	
Mary Frances Brew.....	Binghamton State Hospital
A.B., 1914, Columbia University.	
Chauncey Fairfield Brown.....	Los Angeles City Hospital
A.B., 1916, Park College.	
Howard Newton Cooper.....	Bellevue Hospital
A.B., 1917, Colgate University.	
Raymond S. Crispell.....	Bellevue Hospital
A.B., 1917, Cornell University.	
Alexander G. Davidson.....	City Hospital
B.S., 1914, Cooper Union.	
Wilson Farnsworth Dodd.....	Brooklyn Hospital
Litt.B., 1916, Princeton University.	
Richmond Douglass	Roosevelt Hospital
A.B., 1916, College of Wooster.	
Rufus Lee Durfee.....	New York Hospital
A.B., 1917, Cornell University.	
Russell Sweetser Ferguson.....	Westchester County Hospital
A.B., 1915, University of Maine.	
Thomas Morton French.....	Methodist Episcopal Hospital
A.B., 1915, Cornell University.	
Margaret Evelyn Fries.....	New York Infirmary for Women and Children
A.B., 1916, Barnard College.	
Walter Isaac Galland.....	Graduate School Hospital
A.B., 1911, Cornell University.	University of Pa.
Maurice Gelb	Lincoln Hospital
B.S., 1916, College of the City of New York.	

CORNELL UNIVERSITY MEDICAL COLLEGE.

Abraham Roscoe Harber.....	Lebanon Hospital
B.S., 1916, College of the City of New York.	
Frank West Harrah.....	Rhode Island Hospital
A.B., 1916, University of Denver.	
Meyer Mathews Harris.....	Lebanon Hospital
B.S., 1914, College of the City of New York.	
Louis Hodes	Mt. Sinai Hospital
B.S., 1916, College of the City of New York.	
Phoebe Doris Hoffman.....	Bellevue Hospital
A.B., 1916, Indiana University.	
Milo Ernest Holsted.....	Hartford Hospital
A.B., 1915, Wheaton College.	
Thomas Bernard Joyce.....	Bellevue Hospital
A.B., 1916, Clark University.	& St. Mary's Hospital for Children
Abraham Landy	Gouverneur Hospital
B.S., 1916, College of the City of New York.	
Sam Zachary Levine.....	Mt. Sinai Hospital
A.B., 1914, College of the City of New York.	
Arturo Martinez	Bellevue Hospital
A.B., 1916, Cornell University.	
Laura Miller	New York Hospital
A.B., 1916, Cornell University.	
Stella Miriam Miller.....	Worcester Memorial Hospital
A.B., 1917, Barnard College.	
Maxwell Mitchell	Lincoln Hospital
B.S., 1916, College of the City of New York.	
Harry Ernest Montero.....	Newark City Hospital
B.S., 1916, College of the City of New York.	
Cora Hennen Morris.....	Worcester Memorial Hospital
A.B., 1917, Barnard College.	
Margaret Hathaway Nelson.....	Woman's Hospital, Pa.
A.B., 1917, Goucher College.	
Walter Francis Phelan.....	St. Vincent's Hospital
A.B., 1917, Cornell University.	
Barrett Pincus	Lincoln Hospital
B.S., 1915, College of the City of New York.	
George Joseph Plehn.....	New York City Hospital.
A.B., 1916, Cornell University.	
Mary Reesor.....	New York Infirmery for Women and Children
B.S., 1909, A.M. 1910, Columbia University.	
Georgia Reid	Bellevue Hospital
A.B., 1916, Hunter College.	
Paul Reznikoff	Bellevue Hospital
B.S., 1916, New York University.	
Edwin Philip Russell.....	New York Hospital
A.B., 1917, Cornell University.	

CORNELL UNIVERSITY MEDICAL COLLEGE.

- Ernest Frederick Russell.....New York Hospital
A.B., 1916, Yale University.
- Anne May Seligman..Newark Memorial Hospital and Newark City Hospital
A.B., 1917, Cornell University.
- Jacob Smith Lincoln Hospital
B.S., 1916, College of the City of New York.
- Nathaniel Brown Stanton.....Lenox Hill Hospital
A.B., 1916, Colgate University.
- John Edward Sutton, Jr.....Memorial Hospital and New York Hospital
A.B., 1915, A.M., 1917, Cornell University.
- Guy William Wells.....Rhode Island Hospital
Ph.B., 1916, Brown University.
- Frederica Winestine Worcester Memorial Hospital
A.B., 1916, Vassar College.

CORNELL UNIVERSITY MEDICAL COLLEGE.

STUDENTS, 1920-1921.

Candidates for the Degree of Doctor of Medicine.

FOURTH YEAR.

- Max Bernard Aronowitz, A.B., 1917, College of the City of New York,
New York, N. Y.
- Horace Strow Baldwin, B.S., 1917, Wesleyan University.....Orange, N. J.
- George F. Bock, A.B., 1918, Cornell University.....Lancaster, Pa.
- Harold E. Bogart, A.B., 1918, Cornell University.....New York, N. Y.
- John Russell Carty, B.S., 1917, Princeton University.....Short Hills, N. J.
- William S. Collens, B.S., 1917, College of the City of New York,
Brooklyn, N. Y.
- Nelson W. Cornell, A.B., 1918, Cornell University.....Lockwood, N. Y.
- Madeline Fries, A.B., 1918, Cornell University.....Brooklyn, N. Y.
- Elizabeth M. Fulton, A.B., 1918, Cornell University.....Massena, N. Y.
- Lemuel C. Goldstein, A.B., 1918, Cornell University.....New York, N. Y.
- Wayne Willard Hall, B.S., 1917, Alabama Polytechnic Institute,
Collinsville, Ala.
- Frank C. Henry, Jr., A.B., 1918, Cornell University....Perth Amboy, N. J.
- George Foster Herben, B.S., 1916, Rutgers College...West Englewood, N. J.
- Israel Kenneth Hoffman, B.S., 1918, College of the City of New York,
Passaic, N. J.
- Harriet Hosmer, A.B., 1918, Cornell University.....Buffalo, N. Y.
- Godel I. Hunter, B.S., 1917, College of the City of New York,
New York, N. Y.
- Pasquale Joseph Imperato, Jr., B.S., 1917, College of the City of New
York Brooklyn, N. Y.
- Charles Kaufman, B.S., 1917, College of the City of New York,
Brooklyn, N. Y.
- Dwight Rufus Knapp, A.B., 1915, Yale University.....Danbury, Conn.
- John Robert Andrews Lang, Jr., A.B., 1918, Colgate University,
Mt. Vernon, N. Y.
- Solomon Sydney Lichtman, A.B., 1918, College of the City of New York,
New York, N. Y.
- Robert Ozias Loebel, A.B., 1917, College of the City of New York.
Brooklyn, N. Y.
- Santos Bellini Lucent, B.S., 1917, College of the City of New York,
Hackensack, N. J.
- Robert B. McGraw, A.B., 1918, Cornell University.....Ithaca, N. Y.
- Arthur Matthews Master, B.S., 1916, College of the City of New York,
New York, N. Y.
- Kingsley Darwin Maynard, A.B., 1918, Cornell University....Roscoe, N. Y.
- Henry Gray Morris, A.B., 1918, Cornell University.....Jamestown, N. Y.
- Leighton Payson Rand, A.B., 1916, Cornell University.....Brooklyn, N. Y.

CORNELL UNIVERSITY MEDICAL COLLEGE.

- Joseph Rosenblum, B.S., 1915, College of the City of New York,
New York, N. Y.
- Adelaide Helen Ross, A.B., 1916, Wellesley College.....Nyack, N. Y.
- Paul Farr Russell, A.B., 1916, Boston University.....Buffalo, N. Y.
- Ralph William Schaeffer, B.S., 1916, University of Rochester, Rochester, N. Y.
- Irving Schwartz, B.S., 1917, College of the City of New York,
New York, N. Y.
- Samson Abraham Seley, A.B., 1918, Cornell University....New York, N. Y.
- Lewis Julian Silvers, B.S., 1918, Cornell University.....New York, N. Y.
- Walter Fox Smith, A.B., 1918, Cornell University.....Watertown, N. Y.
- Katherine Douglas Speiden, A.B., 1917, Wellesley College....Summit, N. J.
- Robert George Stewart, B.S., 1917, New York University, Jersey City, N. J.
- William Malcolm Stobbs, A.B., 1915, Cornell University.....Ithaca, N. Y.
- Henry Bruner Sutton, A.B., 1916, Cornell University.....Albion, N. Y.
- Curtis Carver Tripp, A.B., 1918, Dartmouth College.....Fairhaven, Mass.
- David Warshaw, A.B., 1916, Cornell University.....Albany, N. Y.
- Hyla Stowell Watters, A.B., 1915, Smith College.....Atlanta, Ga.
- Harry Weaver, A.B., 1918, Cornell University.....Amsterdam, N. Y.
- Edward Theodore Wilkes, A.B., 1918, College of the City of New York,
Brooklyn, N. Y.
- Paul Truitt Willis, A.B., 1918, Cornell University.....Niagara Falls, N. Y.

THIRD YEAR.

- Otelia Josephine Bengtsson, A.B., 1919, Cornell University, Ossining, N. Y.
- Jacob Baruch Berglas, A.B., 1919, Cornell University.....Brooklyn, N. Y.
- Albert Blau, A.B., 1918, College of the City of New York, New York, N. Y.
- Camillo Anthony Cerchiara, A.B., 1918, College of the City of New York,
New York, N. Y.
- Julius Nathaniel Cohen, B.S., 1918, College of the City of New York,
New York, N. Y.
- Mary Elizabeth Childs, A.B., 1917, Wellesley College....Bernardsville, N. J.
- Joseph Henry Diamond, A.B., 1919, Cornell University, New Brighton, N. Y.
- Jeanette Evans, B.S., 1914, Cornell University.....Windsor, N. Y.
- Lester Mahan Felton, B.S., 1919, Dartmouth College.....Worcester, Mass.
- Abraham Fine, A.B., 1919, Cornell University.....Brooklyn, N. Y.
- Sidney Friedman, A.B., 1919, College of the City of New York,
New York, N. Y.
- Helen Gavin, A.M., 1913, Columbia University.....New York, N. Y.
- Jacob Goeller, A.B., 1919, College of the City of New York..Irvington, N. J.
- Harry Gold, A.B., 1919, Cornell University.....Schenectady, N. Y.
- Edwin Toal Hauser, A.B., 1916, College of the City of New York,
New York, N. Y.
- Clement Alphonsus Jarka, A.B., 1916, Seton Hall College..Mt. Carmel, Pa.
- Reuben Kayser, B.S., 1918, College of the City of New York, New York, N. Y.
- Michael Lake, A.B., 1919, Cornell University.....New York, N. Y.
- Leo Paul Larkin, A.B., 1917, Cornell University.....Ithaca, N. Y.

CORNELL UNIVERSITY MEDICAL COLLEGE.

- Callie H. Larrabee, A.B., 1918, University of Maine.....Frankfort, Me.
 Joseph Milton Levine, A.B., 1919, Cornell University.....Brooklyn, N. Y.
 Leon Isaac Levine, B.S., 1918, College of the City of New York,
 New York, N. Y.
 Edward Harry Levy, A.B., 1918, College of the City of New York,
 Yonkers, N. Y.
 James Carlisle McLeod, A.B., 1917, University of North Carolina,
 Florence, S. C.
 Elizabeth MacNaughton, A.B., 1917, Wellesley College....Brookline, Mass.
 Walter Russell Mead, A.B., 1918, Yale University.....Geneva, Ohio.
 Charles Stern Miller, A.B., 1919, Cornell University.....Corona, N. Y.
 Dean C. Moore, A.B., December 1918, Cornell University....Newark, N. J.
 Louis J. Morse, A.B., 1918, College of the City of New York,
 Richmond Hill, N. Y.
 Isaac Nachmani, A.B., 1918, Cornell University.....Rechoboth, Palestine
 Irving Newman, A.B., 1918, College of the City of New York,
 New York, N. Y.
 Paul F. Nugent, A.B., 1919, Cornell University.....Southampton, N. Y.
 Roger Sherman Palmer, A.B., 1910, Pomona College.....Pomona, Cal.
 Rupert A. Schrankel, A.B., 1919, Cornell University.....Buffalo, N. Y.
 Ainsworth L. Smith, A.B., 1919, Cornell University.....Brooklyn, N. Y.
 Carl H. Smith, A.B., 1915, College of the City of New York. A.M., 1917,
 Columbia University New York, N. Y.
 Heine Smulovitz, A.B., 1919, College of the City of New York,
 New York, N. Y.
 Mary B. Spahr, A.B., 1918, Wellesley College.....Princeton, N. J.
 Charles Stahl, A.B., 1919, Cornell University.....Albany, N. Y.
 John Arthur Taylor, B.S., 1918, Union College.....Schenectady, N. Y.
 Lawrence D. Thompson, B.S., 1917, Rutgers College....River Edge, N. J.
 Edward Tolstoi, A.B., 1919, Yale University.....New Haven, Conn.
 Harry Vesell, A.B., 1919, College of the City of New York, New York, N. Y.

SECOND YEAR.

- Cullen Adlerblum, A.B., 1912, College of the City of New York,
 New York, N. Y.
 Jacob Applebaum, A.B., 1919, College of the City of New York,
 New York, N. Y.
 Lionel Sandler Auster, A.B., 1919, College of the City of New York,
 New York, N. Y.
 Francis Jarvis Bean, A.B., 1917, Clark College.....Worcester, Mass.
 Harry Sidney Berkoff, A.B., 1920, Cornell University.....Brooklyn, N. Y.
 Joseph Judah Berkowitz, B.S., 1918, College of the City of New,
 New York, N. Y.
 Morris Berkowitz, A.B., 1920, Cornell University.....Brooklyn, N. Y.
 Earl Cluff Bonnett, A.B., 1920, Cornell University.....Provo, Utah.
 Melvin Morris Brodie, B.S., 1917, College of the City of New York,
 New York, N. Y.

CORNELL UNIVERSITY MEDICAL COLLEGE.

- Charles Alfred Brown, A.B., 1919, Yale University.....Waterbury, Conn.
Charles Stanford Byron, A.B., 1920, Cornell University....Brooklyn, N. Y.
David Danishefsky, A.B., 1919, College of the City of New York,
New York, N. Y.
Samuel Donner, A.B., 1918, Yale University.....Hartford, Conn.
William Perry Elliott, A.B., 1919, Cornell University....New Berlin, N. Y.
Abraham Feitelberg, A.B., 1920, Cornell University.....New York, N. Y.
Alfred Elias Fischer, A.B., 1919, Cornell University.....New York, N. Y.
Alfred Glennon Flagg, A.B., 1918, Clark University.....Worcester, Mass.
Sidney Harold Freilich, B.S., 1919, College of the City of New York,
New York, N. Y.
Sara Aurelia Froomess, A.B., 1917, Hunter College.....Elizabeth, N. J.
Theodore Gallup, A.B., 1918, St. Lawrence College.....Cassville, N. Y.
Joseph Bivona Giovinco, A.B., 1918, St. John's College.....Brooklyn, N. Y.
Jerome Glaser, A.B., 1919, Cornell University.....Sayre, Pa.
Isabel Globus, A.B., 1919, Hunter College.....Brooklyn, N. Y.
Richard Everest Gove, A.B., 1920, Cornell University.....Pew, N. Y.
Kristian Gosta Hansson, A.B., 1920, Cornell University....Cambridge, Mass.
Robert Elwood Heimbach, A.B., 1917, Princeton University, Quakertown, Pa.
Samuel Hochman, B.S., 1918, Cornell University.....New York, N. Y.
Marjorie Ross Hopper, A.B., 1919, Smith College.....Nyack, N. Y.
Helen Pierson Huie, A.B., 1920, Cornell University.....New York, N. Y.
Russell Hills Iler, A.B., 1920, Cornell University.....Brooklyn, N. Y.
Michael Iserman, B.S., 1919, College of the City of New York,
New York, N. Y.
Myron Robinson Jackson, B.S., 1919, Trinity College.....Norwich, Conn.
Benjamin Jacobs, B.S., 1919, College of the City of New York,
New York, N. Y.
Leif George Jensen, A.B., 1920, Columbia University,
Port Richmond, S. I., N. Y.
Charles Kantor, B.S., 1919, College of the City of New York,
New York, N. Y.
Hyman Klein, A.B., 1920, Cornell University.....Brooklyn, N. Y.
Willis Sackett Knighton, A.B., 1920, Cornell University, New York, N. Y.
Harry Esslier Kroin, A.B., 1920, Cornell University.....Brooklyn, N. Y.
Philip Levine, B.S., 1919, College of the City of New York, Brooklyn, N. Y.
Lawrence Levy, B.S., 1917, College of the City of New York,
New York, N. Y.
Edith Louise McClay, A.B., 1920, Cornell University.....Summit, N. J.
John Francis McDermott, B.S., 1917, Union College.....Schenectady, N. Y.
Jennie Elizabeth Mabee, A.B., 1919, Cornell University.....Ithaca, N. Y.
Leo Markowitz, A.B., 1919, College of the City of New York,
New York, N. Y.
Margaret Grace Merriss, A.B., 1914, Cornell University.....Brooklyn, N. Y.
Ruth Mae Morris, A.B., 1919, Wellesley College.....Chicago, Ill.
Gladys Marie Muller, A.B., 1917, Cornell University.....Brooklyn, N. Y.
Samuel H. Nerenstone, A.B., 1918, College of the City of New York,
New York, N. Y.

CORNELL UNIVERSITY MEDICAL COLLEGE.

- Charles Julius Oppenheim, Ph.B., 1917, M.S., 1919, University of Chicago,
Chicago, Ill.
- Samuel Jones Pashley, B.S., 1919, Colgate University, Hudson Falls, N. Y.
- Louis Leo Perkel, B.S., 1919, New York University.....Jersey City, N. J.
- Irving N. Rattner, A.B., 1919, College of the City of New York,
New York, N. Y.
- Philip Reichert, A.B., 1918, College of the City of New York,
New York, N. Y.
- Lester Rosenberg, B.S., 1917, College of the City of New York,
Brooklyn, N. Y.
- Joseph Shiffer, A.B., 1920, Cornell University.....Brooklyn, N. Y.
- Samuel Silber, B.S., 1919, College of the City of New York, Brooklyn, N. Y.
- Sidney Attilio Thompson, A.B., 1918, Wesleyan University,
Greenwich, Conn.
- Eva Topkins, A.B., 1920, Cornell University.....Califon, N. J.
- Samuel W. Vernick, B.S., 1919, College of the City of New York,
New York, N. Y.
- William Allen Walker, A.B., 1920, Cornell University.....Byron, N. Y.
- Samuel Weinreb, B.S., 1920, College of the City of New York,
Brooklyn, N. Y.
- Samuel Weinstein, B.S., 1920, College of the City of New York,
New York, N. Y.
- Harriet Marion White, A.B., 1914, Vassar College.....Richmond Hill, L. I.
- Mildred Marie Wicker, A.B., 1919, Cornell University.....Livonia, N. Y.
- Meyer Wigdor, B.S., Feb., 1917, A.M., 1917, Cornell University,
New York, N. Y.
- Abraham Lincoln Wincor, A.B., 1920, Cornell University...New York, N. Y.
- Margaret Shepard Witter, A.B., 1917, Smith College.....Rhinebeck, N. Y.

FIRST YEAR.

- Henri Ernest Abel, A.B., 1920, Colgate University.....Elizabeth, N. J.
- Benjamin Israel Ashe, B.S., 1920, College of the City of New York,
Brooklyn, N. Y.
- Barbara Beattie, A.B., 1920, Vassar College.....Littleton, N. H.
- Edith Dorothy Bell, A.B., 1920, Wellesley College.....Salisbury, Conn.
- LeRoy Walton Black, Ph.B., A.M., 1920, Brown University, Rutherford, N. J.
- Joseph Roosevelt Breitbart, A.B., 1920, Ohio State University,
Cleveland, Ohio
- Herbert Cecil Brokenshire, B.S., 1920, Middlebury College, Winchester, N. H.
- Frederick Anthony Cracco, Cornell University*.....Jersey City, N. J.
- David Lion Drabkin, A.B., 1919, College of the City of New York,
New York, N. Y.
- Robert Gill Mills Dunovant, A.B., 1917, Wofford College, Edgefield, S. C.
- Fabian Dunphy, A.B., 1917, Holy Cross College.....Newport, R. I.
- Bernard Samuel Fein, A.B., 1920, New York University.....Newark, N. J.
- Robert Kenneth Felter, A.B., 1920, Cornell University....Pearl River, N. Y.
- Ella Harriet Fishberg, A.B., 1920, Barnard College.....New York, N. Y.

*Admitted under Clause II.

CORNELL UNIVERSITY MEDICAL COLLEGE.

- Eli Maurice Friedman, A.B., 1917, Cornell University.....Massena, N. Y.
 Thomas Joseph Garrick, A.B., 1917, Boston College.....Somerville, Mass.
 Benjamin Gershberg, Cornell University*.....Newark, N. J.
 Alice Stearns Gibb, A.B., 1918, Barnard College.....New York, N. Y.
 Harlan S. Heim, A.B., 1920, Western Union College.....Dawson, Neb.
 Joseph Herzstein, B.S., 1913, College of the City of New York, M.S.,
 1918, Massachusetts Institute of Technology.....New York, N. Y.
 Martin Francis Hession, A.B., 1917, College of the City of New York,
 New York, N. Y.
 Hall Gillam Holder, A.B., 1920, Pomona College.....Santee, Calif.
 Seth Ransom Jagger, Cornell University*.....Flushing, N. Y.
 Frank Everts Kellner, B.S., 1920, University of Washington,
 Hamilton, Wash.
 James Rosario Lomauro, A.B., 1920, Johns Hopkins University,
 Passaic, N. J.
 Louis Lombard, A.B., 1920, Syracuse University.....Brooklyn, N. Y.
 William Claire Menninger, A.B., 1919, Washburn College....Topeka, Kans.
 Maurice Francis O'Brien, A.B., 1920, Holy Cross College....Brooklyn, N. Y.
 John Anthony O'Donoghue, A.B., 1920, Mt. St. Mary's College,
 Passaic, N. J.
 James Vincent O'Reilly, A.B., 1920, Manhattan College....New York, N. Y.
 Harry Sidney Pizer, B.S., 1917, M.S., 1918, Syracuse University,
 Brooklyn, N. Y.
 Douglas Lee Root, Cornell University*.....Cooperstown, N. Y.
 Joseph Rosenheck, B.S., 1920, College of the City of New York,
 New York, N. Y.
 Carl Gustave Scott, A.B., 1920, Johns Hopkins University, Englewood, N. J.
 Paul Sylvester Seager, Cornell University*.....Morristown, N. J.
 Robert Philo Shelton, A.B., 1919, Yale University.....Bridgeport, Conn.
 Leslie Ray Taber, Ph.B., 1919, Brown University.....Auburn, N. Y.
 Michael Martin Tetelman, B.S., 1918, New York University, New York, N. Y.
 William Henry Von Oehsen, Cornell University*.....New York, N. Y.
 Stephen Weissberger, B.S., 1920, College of the City of New York,
 New York, N. Y.
 Walter Frederick Welton, A.B., 1919, Columbia University,
 Mohégan Lake, N. Y.
 David Wexler, Cornell University*.....Brooklyn, N. Y.
 James Lewis Winemiller, A.B., 1920, Fordham University, Great Neck, N. Y.
 Frank Jacob Zitserman, A.B., 1920, Brown University....Providence, R. I.

FIRST YEAR AT ITHACA.

- Rose H. Andrè, A.B., 1920, Cornell University.....Buffalo, N. Y.
 Louis Caplan, Cornell University*.....Albany, N. Y.
 Ruth Crabtree, Barnard College* Montgomery, N. Y.
 Irene Davis, Cornell University* Pittsburgh, Pa.
 Edward V. Denneen, Cornell University*.....Buffalo, N. Y.

*Admitted under Clause II.

CORNELL UNIVERSITY MEDICAL COLLEGE.

Johanna Dieckmann, Cornell University*	Buffalo, N. Y.
Garrett D. Duryea, Cornell University*	Brooklyn, N. Y.
Julian M. Freston, Cornell University*	Milton, N. Y.
Francis D. Gunn, Cornell University*	Lexington, Ky.
Agnes N. Hall, Cornell University*	Lockport, N. Y.
Kiyoshi Hosoi, University of Hawaii*	Honolulu, T. H.
Louisa E. Keasby, A.B., 1919, Cornell University	New York City
Tsae Ngoo Kwong, Cornell University*	Shanghai, China
William M. Maloney, Cornell University*	Perth, Ont.
A. Lardner Moore, Cornell University*	Mooresville, N. C.
James D. Peters, A.B., 1920, Hamilton College	Utica, N. Y.
Curtis T. Prout, Cornell University*	Windham, N. Y.
James A. Ramsey, Cornell University*	Yonkers, N. Y.
Evarts F. Sands, Cornell University*	Morristown, N. J.
Grace M. Santoro, Cornell University*	Waterbury, Conn.
Sutherland Eric Simpson, Cornell University*	Ithaca, N. Y.
Alfred Snedecker, Cornell University*	Brighton, N. Y.
Martha C. Souter, Cornell University*	Whitehall, N. Y.
Walter H. Stubenrauch, Cornell University*	Hoboken, N. J.
John Trescher, Cornell University*	Jeannette, Pa.
Walter Kent Van Alstyne, Cornell University*	Binghamton, N. Y.
Frederic L. Vosburgh, Cornell University*	Auburn, N. Y.
Annie Yoffa, Cornell University*	Victoria, Australia

CANDIDATES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

Helen Jeanette Allen, A.B., 1913, Vassar College	Cincinnati, Ohio
Nathan Frank Blau, D.V.M., 1918, Cornell University	Ithaca, N. Y.
Alfred Chanutin, Ph.B., 1917, Yale University	New Haven, Conn.
Thomas Palmer Nash, Jr., A.B., 1910, A.M., 1911, University of North Carolina	Elizabeth City, N. C.

GRADUATE STUDENTS (NOT CANDIDATES FOR A DEGREE).

Edward Leo Berger, M.D., 1909, Cornell University (Immunology)	Brooklyn, N. Y.
William Clark Berry, A.B., 1915, Marietta College, M.D., 1919, Western Reserve (Ophthalmology)	Shadyside, Ohio
Joseph Richard Brown, A.B., 1902, M.D., 1911, Georgetown University, (Anatomy)	New York, N. Y.
Carl Miller Burdick, M.D., 1912, New York University, (Ophthalmology).	Seattle, Wash.
Charles Louis Chasins, M.D., 1902, Cornell University (Anatomy),	New York, N. Y.
Mark Cohn, M.D., 1908, Cornell University (Anatomy)	New York, N. Y.
Harold Oscar Cooperman, M.D., 1915, St. Louis University (Anatomy)	New York, N. Y.
Ray Karchmer Daily, M.D., 1913, University of Texas, (Ophthalmology),	Houston, Texas.

*Admitted under Clause II.

CORNELL UNIVERSITY MEDICAL COLLEGE.

- Bennett White Dewar, M.D., 1892, Albany Medical College (Anatomy),
Cooperstown, N. Y.
- John Hughes Dunnington, M.D., 1915, University of Virginia,
(Ophthalmology), New York, N. Y.
- James David Edwards, M.D., 1916, National University (Ophthalmology),
St. Louis, Mo.
- Burton Wright Egan, M.D., 1904, Medical College of Indiana
(Ophthalmology) Logansport, Ind.
- Sanford Werner Forbush, M.D., 1907, Northwestern University
(Anatomy) Orfordville, Wis.
- Everett Logan Goar, A.B., 1907, M.D., 1909, University of Chicago
(Ophthalmology) Houston, Texas.
- Leonard Knight Graves, M.D., 1885, Columbian University, 1887,
Bellevue Hospital Medical College (Ophthalmology)....Elmhurst, N. Y.
- John M. Gunning, M.D., 1902, Physicians and Surgeons, Chicago
(Anatomy) Spokane, Wash.
- Joseph Daniel Hallinan, M.D., 1908, Long Island College Hospital
(Anatomy) Richmond Hill, N. Y.
- Joseph Paul Israel, M.D., 1916, Tulane University (Ophthalmology),
New York, N. Y.
- Carl Kaplan, M.D., 1914, New York University (Anatomy) ..Brooklyn, N. Y.
- Einar Langfeldt, M.D., 1909, Christiania University, Norway (Physiology),
Christiania, Norway.
- James Elzar Lebensohn, B.S., 1914, M.S., 1915, M.D., 1917, University
of Chicago (Anatomy, Ophthalmology).....Chicago, Ill.
- Julius Watkins McCall, M.D., 1915, Tulane University (Ophthalmology),
Montgomery, Ala.
- John Jacob Posner, D.D.S., 1914, New York College of Dentistry
(Anatomy) Forest Hills, L. I.
- Wilbur Randall Schoonmaker, M.D., 1919, New York Hospital Medical
College (Anatomy) Yonkers, N. Y.
- Charles Abraham Spivacke, M.D., 1899, Cornell University
(Immunology) New York, N. Y.
- George Madison Truluck, B.S., 1908 Chicora College, S. C., M.D., 1911,
Medical College of South Carolina (Anatomy).....Marion, S. C.
- John Augustine Tyree, M.D., 1908, Medical College of Virginia
(Ophthalmology) Remington, Va.
- Oscar Wald, M.D., 1914, Fordham University (Anatomy), Brooklyn, N. Y.
- James Monroe Wicks, M.D., 1905, Cornell University (Anatomy),
Jamaica, N. Y.

SUMMARY.

Fourth Year	46
Third Year	43
Second Year	67
First Year at New York City.....	44
First Year at Ithaca	28
Candidates for the degree of M.D.....	228
Candidates for the degree of Ph.D.....	4
Graduate Students	28

CORNELL UNIVERSITY

The GRADUATE SCHOOL (Degrees A.M., Ph.D., etc.)

The COLLEGE OF ARTS AND SCIENCES (Degrees A.B. and B.Chem.)

The COLLEGE OF LAW (Degree LL.B.)

The MEDICAL COLLEGE* (Degree M.D.)

The NEW YORK STATE VETERINARY COLLEGE (Degree D.V.M.)

The COLLEGE OF AGRICULTURE (Degree B.S.)

The COLLEGE OF ARCHITECTURE (Degree B.Arch.)

The COLLEGE OF CIVIL ENGINEERING (Degree C.E.)

The SIBLEY COLLEGE OF MECHANICAL ENGINEERING AND MECHANIC ARTS
(Degree M.E.)

*For copies of the University Publications and for additional information,
apply to*

SECRETARY, CORNELL UNIVERSITY,
Ithaca, N. Y.

*The full four-year course of the CORNELL UNIVERSITY MEDICAL COLLEGE is given in the City of New York; the work of the first year is also given at Ithaca. Any student may take the first year either at New York City or at Ithaca. *All students take the last three years of the course in New York City only.* Special announcement of the Medical College and information of every kind regarding all four years will be furnished on application to

SECRETARY, Cornell University Medical College,
First Avenue and 28th Street, New York City.

Or, (regarding first year at Ithaca),

SECRETARY, Cornell University Medical College,
Stimson Hall, Ithaca, N. Y.

CORNELL UNIVERSITY

The GRADUATE SCHOOL (Degrees A.M., Ph.D., etc.)

The COLLEGE OF ARTS AND SCIENCES (Degrees A.B. and B.Chem.)

The COLLEGE OF LAW (Degree LL.B.)

The MEDICAL COLLEGE* (Degree M.D.)

The NEW YORK STATE VETERINARY COLLEGE (Degree D.V.M.)

The COLLEGE OF AGRICULTURE (Degree B.S.)

The COLLEGE OF ARCHITECTURE (Degree B.Arch.)

The COLLEGE OF CIVIL ENGINEERING (Degree C.E.)

The SIBLEY COLLEGE OF MECHANICAL ENGINEERING AND MECHANIC ARTS
(Degree M.E.)

*For copies of the University Publications and for additional information,
apply to*

SECRETARY, CORNELL UNIVERSITY,
Ithaca, N. Y.

*The full four-year course of the CORNELL UNIVERSITY MEDICAL COLLEGE is given in the City of New York; the work of the first year is also given at Ithaca. Any student may take the first year either at New York City or at Ithaca. *All students take the last three years of the course in New York City only.* Special announcement of the Medical College and information of every kind regarding all four years will be furnished on application to

SECRETARY, Cornell University Medical College,
First Avenue and 28th Street, New York City.

Or, (regarding first year at Ithaca),

SECRETARY, Cornell University Medical College,
Stimson Hall, Ithaca, N. Y.